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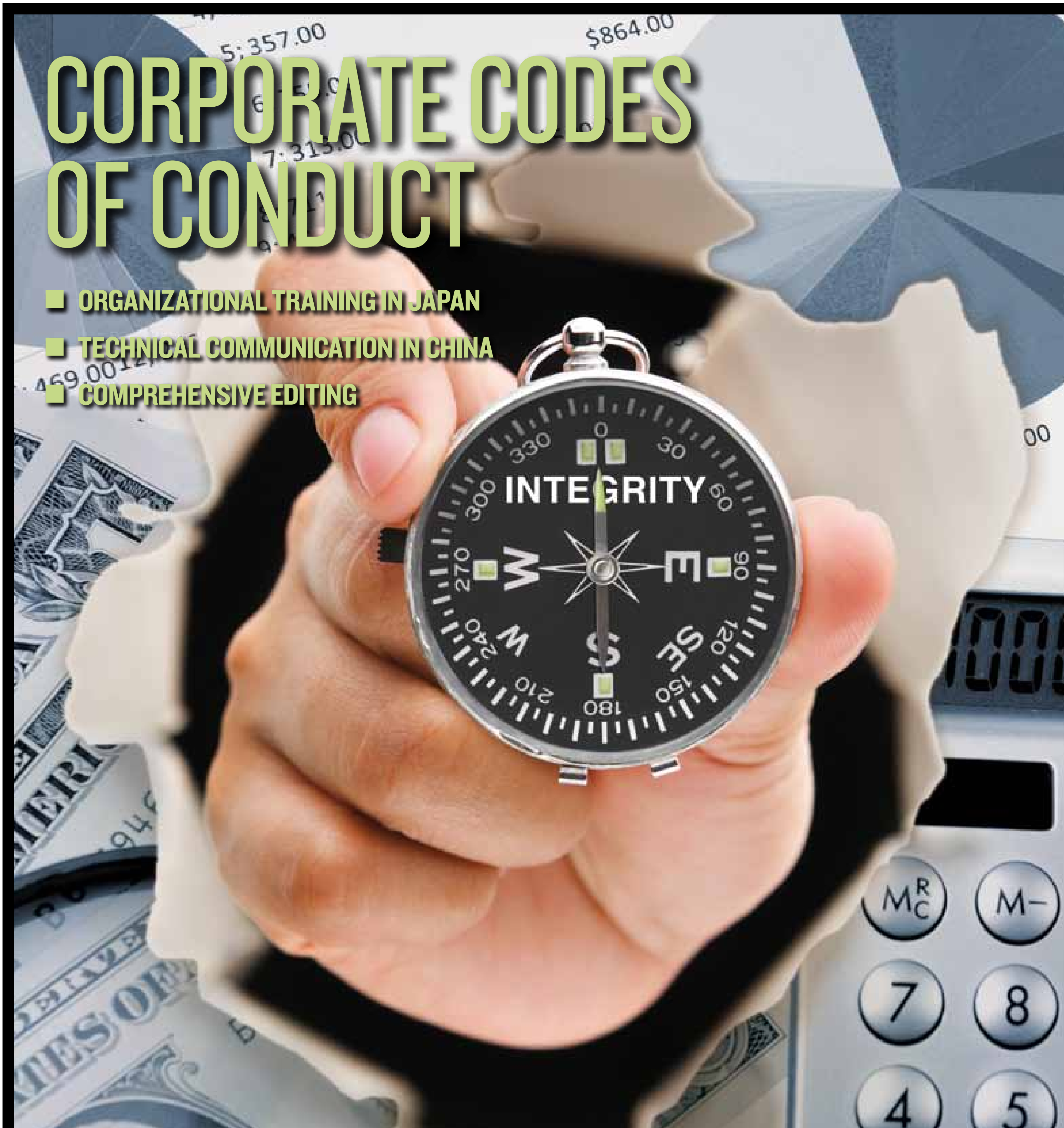
Technical COMMUNICATION

Journal of the Society for Technical Communication

CORPORATE CODES OF CONDUCT

- ORGANIZATIONAL TRAINING IN JAPAN
- TECHNICAL COMMUNICATION IN CHINA
- COMPREHENSIVE EDITING



What is a technical communicator? **Technical communicators develop and design instructional and informational tools needed to ensure safe, appropriate, and effective use of science and technology, intellectual property, and manufactured products and services. Technical communicators combine multimedia knowledge and strong communication skills with technical expertise to provide education across the entire spectrum of users' abilities, technical experience, and visual and auditory capabilities. For more information visit www.stc.org/story/tc_tw.asp.**

The Society for Technical Communication is the largest association of technical communicators in the world. STC is currently classifying the Body of Knowledge for the field and communicating the value of technical communication. Its volunteer leadership continues to work with government bodies and standards organizations to increase awareness and accurate perception of technical communication. Membership is open to all with an interest in technical communication. Visit the STC Web site (www.stc.org) for details on membership categories, fees, and benefits.

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Technical COMMUNICATION

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About the Journal

Technical Communication is a peer-reviewed, quarterly journal published by the Society for Technical Communication (STC). It is aimed at an audience of technical communication practitioners and academics. The journal's goal is to contribute to the body of knowledge of the field of technical communication from a multidisciplinary perspective, with special emphasis on the combination of academic rigor and practical relevance.

Technical Communication publishes articles in five categories:

- **Applied research** – reports of practically relevant (empirical or analytical) research
- **Applied theory** – original contributions to technical communication theory
- **Case history** – reports on solutions to technical communication problems
- **Tutorial** – instructions on processes or procedures that respond to new developments, insights, laws, standards, requirements, or technologies
- **Bibliography** – reviews of relevant research or bibliographic essays

The purpose of *Technical Communication* is to inform, not impress. Write in a clear, informal style, avoiding jargon and acronyms. Use the first person and active voice. Avoid language that might be considered sexist, and write with the journal's international audience in mind.

Our authority on spelling and usage is *The American Heritage Dictionary,* 4th edition; on punctuation, format, and citation style, the *Publication Manual of the American Psychological Association*, 6th edition.

Manuscript Preparation and Submission

Submitting a manuscript to *Technical Communication* for review and possible publication implies that its submission has been approved by all authors, researchers, and/or organizations involved, that the manuscript (or a substantial portion) has not been published before, and that the manuscript is not under review elsewhere.

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The typical article length is between 5,000 and 8,000 words. Exceptions are possible.

Use up to three levels of headings, and indicate them clearly. Do not number headings of sections and subsections.

FIRST-LEVEL HEADING

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Second-level heading

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Except for the cover page, remove all identifying information from the manuscript. This includes author names, author affiliations, acknowledgments, and references to work in progress or unpublished manuscripts.

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Microsoft Word files are preferred. If you use another word processor, a Rich Text Format (RTF) file is also acceptable. Organize your manuscript as follows:

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- Page 3: Up to five keywords and a practitioner's take-away (maximum 100 words) – A bulleted list summarizing the practical implications of the article
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Send the manuscript as an attachment to an e-mail message to the editor-in-chief, Menno de Jong (e-mail: TCEditor@gw.utwente.nl).

Review Process

The editor-in-chief will read your manuscript and check its potential suitability for the journal. In the case of a positive outcome, the manuscript will be sent to three independent referees for a double-masked review. On the basis of the referees' recommendations, the editor will send you a decision about the manuscript. There are five possibilities: (1) reject, (2) revise and resubmit, (3) accept with major revisions, (4) accept with minor revisions, and (5) accept as is.

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Menno D.T. de Jong, Editor

Exploring the Borders of Technical Communication: Corporate and Organizational Communication

With STC's Body of Knowledge project, the technical communication community strongly focuses on issues of professional and academic identity: Who are we, how has our field developed, and what do we have to offer? It is hard to think of anything more important in the highly competitive professional and academic environment we are currently in. However, it may also be fruitful to consider the developments in adjacent fields, which may complement our knowledge and skills and offer opportunities for technical communicators. In a number of editorials, I would therefore like to explore the borders of our discipline.

Academic journals that focus on communication may be divided into general journals that mainly seem to approach communication as a societal phenomenon, and more specific journals that primarily see communication as an instrument organizations need to achieve their goals. Examples of the general journals are the ones published by the International Communication Association (ICA), such as *Communication Theory* and the *Journal of Communication*. Specific journals focus, for instance, on technical communication, marketing communication, health communication, human-computer interaction, business communication, or corporate and organizational communication.

In this editorial, I will explore the interface between technical communication and corporate and organizational communication. Historically, a distinction can be made between corporate and organizational communication. Corporate communication specifically addresses issues of identity, image and reputation, and emphasizes the required univocality in an organization's (external) representation. Organizational communication focuses on the perspective of employees within an organization, and thus highlights the multivocality within an organization. Organizations, in this view, are phenomena that emerge from the concerted efforts individuals make to fulfil their own needs. This reflects a difference in dominant research paradigms. In corporate communication, research tends to be strongly functionalistic: Communication is seen as a tool that should be improved for the benefit of the organization. In organizational communication, research is often interpretive: the main goal is to better understand the way employees make sense of the organization they work for and the job they have.

It would not make sense to dedicate this editorial to the differences between technical communication and corporate and organizational communication. The differences are quite obvious. But what about the potential overlap, common ground, and synergy? In my view, four characteristics of our discipline call for attention to developments in the fields of corporate and organizational communication. First, the field of technical communication appears to be professionally oriented: Everything that affects the daily work of technical communicators is considered to be of potential interest. Second, all technical communicators work in organizational contexts. To fully understand the work of technical communication professionals, organizational variables must be taken into account. Third, many technological innovations are implemented in organizational settings. On the basis of their expertise in gearing technology to the needs of people and instructing people to use technological products, technical communicators may significantly contribute to such innovation processes. Fourth, the context of corporate and organizational communication offers many complex writing opportunities for which technical communicators appear to be very well equipped.

Technical Communication as a Professionally Oriented Discipline

The variety of topics addressed in technical communication journals and magazines suggests that this selection is not solely made on the basis of conglomerates of theoretical frameworks or communication problems, but also on the basis of practical issues technical communicators are confronted with. Everything that may be helpful to the job of a technical communicator may be addressed in the literature. In the past we have, for instance, seen articles about green printing, copyright issues, and attracting visitors to the Web sites of technical communication agencies. As a result, all organizational aspects that technical communicators have to deal with are of potential interest to the field as well.

The Relevance of Organizational Contexts

Technical communication professionals do most of their work in organizational contexts. The awareness has grown that organizational characteristics may strongly affect the job of technical communicators. Relevant issues are the position technical communicators have in the overall organizational structure, and the functioning of multidisciplinary teams within and between organizations. Furthermore, it seems crucial to pay attention to the core values, mission, vision and identity of organizations. Only when the quality of the user experience is recognized as one of the central features of an organization, technical communicators may be expected to receive sufficient support in their attempts to serve the users. Discussions about the added value of the work of technical communicators may be enriched by research attention for corporate reputation. To what extent can technical communicators contribute to the corporate reputation of an organization?

Technological Innovations in Organizations

Many technological innovations in organizations fail. Implementations of new software systems, new media or new work procedures often cause problems and do not have the intended effects. This is not unique for technological innovations: The same applies to mergers, major strategy changes and acquisitions. In the majority of the cases, the human factor appears to be the main cause of the problems. Either the decision on the technological innovation appears to be suboptimal or the implementation falls short, often because of friction between the existing organizational procedures and the new system requirements. Both problems are linked to the core of the competences of technical communicators, who have the expertise to advise on technological innovations and to facilitate a smooth implementation process aimed at adjusting intended users and technology to each other. The same things technical communicators do for individual users they can also do for technology in complex organizational settings.

Writing Opportunities for Technical Communicators

Finally, technical communicators distinguish themselves from many other communication professionals by their attention for functional writing skills. Important and complex documents that have to be written within an organization may be a really good opportunity for technical communication professionals, especially if the documents have more or less instructional aims.

In all, it seems interesting to further explore the relationship between technical communication and corporate and organizational communication in specific research projects. There is a lot to be gained from collaborative projects aimed at combining insights from both fields.

Upcoming Changes in the Editorial Team

Much to my regret, the two associate editors of the journal, Sherry Southard and Avon Murphy, have decided to take a step back in the course of this year. Sherry Southard has been the editor of the Recent & Relevant section for nine years. Avon Murphy has been the editor of the Book Reviews section for 18 years. Both sections have always been highly appreciated by the *Technical Communication* readers and have contributed much to the success of the journal. Sherry and Avon did a terrific job soliciting contributions, selecting content, and editing texts for their journal section. What is more, they provided invaluable advice about the further development of the journal. It was a privilege to work with them. I am very glad that Sherry and Avon decided to stay on the journal's Editorial Advisory Board. I am also glad to announce that we have already found two very competent successors. Lyn Gattis is going to be the new Recent & Relevant editor. Jackie Damrau will serve as the new Book Reviews

editor. Welcome to the team, Lyn and Jackie!

In this Issue

The first article in this issue, by Sam Dragga, is a good example of the interface between technical communication and corporate and organizational communication. In the article, corporate codes of conduct are analyzed, focusing on the questions whether their formulation emphasizes compliance or cooperation, and whether they distinguish between legal and ethical issues. On the basis of a thorough analysis of three documents, he shows that current codes of conduct are far from optimal, and that technical communicators may be qualified to contribute to this complex type of document.

The following two articles both address the increasingly important topic, intercultural communication. In a detailed case study of the adaptation of an organizational training for Japanese audiences, James Melton focuses on the role of physical and social spaces in a high-context culture. On the basis of interviews, a survey and observation, Daniel Ding describes the characteristics of an academic technical communication program in China. His results show that there are fundamental, culture-inspired differences compared to technical communication programs in western countries.

The fourth article, by Michael Albers and John Marsella, focuses on students' comprehensive editing abilities. On the basis of an analysis of student feedback on a report, they conclude that technical communication pedagogy should focus more on the structural aspects of document quality.

List of Reviewers 2010

The following practitioners and scholars have contributed to the success of the journal by reviewing one or more manuscripts, often providing the authors with many useful suggestions to further improve their contributions. Many thanks for your insights and efforts.

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Cooperation or Compliance: Building Dialogic Codes of Conduct

Sam Dragga

Abstract

Purpose: Adapting the ethics of philosopher Henri Bergson, this article offers a theory to explain the volatile legal-ethical environment in which codes of conduct operate and proposes that technical communicators adopt this theory to build dialogic codes of conduct.

Method: The article explicates and illustrates Bergson's theory of social and dynamic moralities (i.e., ethics as regulation of cooperative individuals and ethics as inspiration by heroic individuals) and offers a critical reading of three corporate codes of conduct from the perspective of this theory, emphasizing five factors: language emphasizing cooperation versus compliance, identification of authorship, clarity of ethical versus legal obligations, inclusion of humanizing pictorial images, and coverage of heroic individuals.

Results: None of the corporate codes of conduct examined truly exploit the immense rhetorical power of narrative or illustrations. None exclusively emphasize cooperation or entirely specify authorship. None are altogether lucid or consistent in separating legal and ethical issues. Existing practices yield a missed opportunity to inspire as well as stipulate ethical behavior.

Conclusion: Technical communicators are skilled in rhetoric, studied in ethics, and experienced in writing policies and instructions and in soliciting information from sources of knowledge and power. Technical communicators could thus be uniquely qualified to develop dialogic codes of conduct for corporations, industries, and professions.

Keywords: code of conduct; ethical; legal; I-thou relationships, verbal-visual communication

Practitioner's Takeaway

- Corporate codes of conduct offer opportunities and challenges for technical communicators in their practice, in their teaching, and in their research.
- Technical communicators could contribute their skills in both verbal and visual communication to making productive changes in corporate codes of conduct.

Organizations like to point to their code of conduct as evidence of their dedication to moral integrity in their operations, to high ethical standards for their employees, to genuine care for the health and safety of their customers, to community engagement and environmental responsibility. It is usually the focal point or bible of a wider ethics program that includes multiple resources (e.g., declarations of principles, frequently asked questions [FAQs], help lines for getting answers to specific questions and for reporting ethics violations).

The code of conduct also offers the organization partial insulation in case of unethical or illegal activities, especially by managers or executives, because the organization will claim that the individual's misbehavior was a violation of its explicit policies. Following a series of catastrophic improprieties by executives of several major corporations and the resulting passage of the Sarbanes-Oxley Act of 2002 (SOX), the U.S. Securities and Exchange Commission in 2003 directed public companies either to adopt a corporate code of conduct or explain why it was unnecessary to do so. Thereafter, in 2004, the New York Stock Exchange and NASDAQ specified that their listed public companies must adopt codes of conduct covering such topics as conflicts of interest, confidentiality of information, fair dealing with clients and suppliers, use of corporate assets, compliance with rules and regulations, and reporting of illegal or unethical behavior.

Corporate codes of conduct thus operate in a legal and ethical environment, addressing multiple audiences both inside and outside the organization (e.g., employees, prospective employees, shareholders, prospective shareholders, clients and customers, suppliers, political leaders, regulators and inspectors, industry officials, educators in related fields, community activists, ordinary citizens). And this intersection of the legal and the ethical generates a rhetorical situation of extraordinary volatility, with individuals navigating among principles and practices in four key sectors: ethical and legal, unethical and illegal, legal but unethical, and ethical but illegal (see Figure 1).

Obviously, a multiplicity of intersecting and shifting influences (e.g., job satisfaction, religious training, economic pressures, family expectations, pertinent social policies, experience of negative consequences for unethical behavior) might guide individuals in their navigation across the sectors of this environment and direct or disrupt their receptivity to the aspirations and regulations in a code of conduct. Stajkovic and Luthans (1997), for example, propose a triad of interanimating

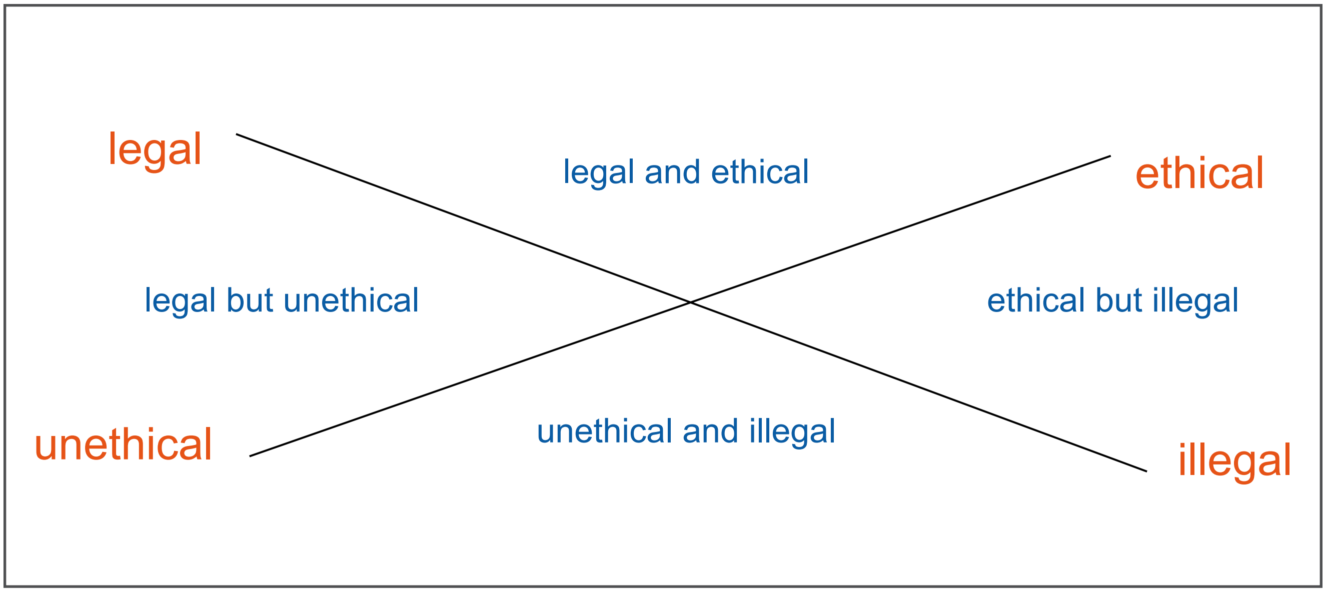

Figure 1. Four kinds of legal-ethical relationships

institutional, personal, and organizational variables, all themselves subject to cultural adaptation, while Cassell, Johnson, and Smith (1997) specify the key factors as the code itself (i.e., the issues covered and its process of composition and implementation), formal and informal controls of the organization, and individual influences of perception and self-regulation.

The research on codes of conduct is extensive, with almost exclusive focus on (1) processes for creating, implementing, and supporting codes (e.g., Helin & Sandström, 2008; Kaptein & Wempe, 1998; Lere & Gaumnitz, 2007; Nitsch, Baetz, & Hughes, 2005; Schwartz, 2002; Sethi, 2003); (2) issues covered in codes (e.g. Canary & Jennings, 2008; Carasco & Singh, 2003; Hite, Bellizzi, & Fraser, 1988; Kaptein, 2004; Lefebvre & Singh, 1996; Pollach, 2003; Silver, 2005; Singh, 2006; Wood, 2000), and (3) effectiveness of codes (e.g., Adams, Tashchian, & Shore, 2001; Cassell, Johnson, & Smith, 1997; Farrell, Cobbin, & Farrell, 2002; Kaptein & Schwartz, 2008; Lere & Gaumnitz, 2003; McKinney & Moore, 2008; Peterson, 2002; Schwartz, 2001, 2004; Somers, 2001; Stevens, 2008; Weller, 1988).

In addition, the Ethisphere Institute periodically assesses corporate codes of conduct using eight weighted criteria:

- 5%: Public Availability (readily available to all stakeholders)
- 15%: Tone from the Top (leadership visibly committed to values and topics covered)
- 20%: Readability and Tone (easy to read and reflective of targeted audience)
- 10%: Nonretaliation & Reporting (explicit nonretaliation commitment and dedicated resources available for reporting code violations)
- 10%: Commitment & Values (embeds corporate values or mission language and identifies ethical commitments to stakeholders)
- 20%: Risk Topics (addresses all key risk areas for company's given industry)
- 5%: Comprehension Aids (provides comprehension aids: e.g., Q&As/FAQs, checklists, examples, case studies)
- 15%: Presentation & Style (inviting layout, fonts, pictures, taxonomy, and structure)

According to Helin and Sandström's (2007) review of research, almost all studies of codes of conduct are limited to reporting the findings of surveys, interviews, and discourse analyses, and little effort is given to theorizing—either theories of ethics or theories of codes of conduct: "The explicit use of theory, except for a few studies, is rare" (p. 261). (A noteworthy exception is Paine's 1994 discussion of "compliance strategies" that focus on deterrence and detection versus "integrity strategies" that emphasize the unifying power of guiding principles.) In addition, the evidence of efficacy is ambiguous: Of 79 empirical studies examined by Kaptein and Schwartz (2008), "35% of the studies have found that codes are effective, 16% have found that the relationship is weak, 33% have found that there is no significant relationship, and 14% have presented mixed results" (p. 113).

Theorizing Codes of Conduct

The challenge is thus to offer a theory that explains the volatile legal-ethical environment in which codes of conduct operate and develop codes of conduct according to this guiding theory. I propose that the writings of philosopher Henri Bergson (1932/1954) offer us this theory.

According to Bergson, to function within a society (or industry or profession), individuals must adopt certain shared perspectives (e.g., laws). This social morality is a push—a pressure on individuals to do everything necessary to keep the society operating, to subjugate enough of their individuality to achieve compliance with the society's rules and regulations. The objective of this social morality is stability. Also guiding individuals, however, is a dynamic morality: That is, individuals perceive heroic human beings deserving of imitation and adopt their ethical principles and practices. This dynamic morality operates as a pull—a moral calling, a morality of aspiration. The objective of this dynamic morality is progress.

Bergson's theory of ethics offers a vital insight on the map of the legal-ethical environment: The legal-and-ethical sector and the unethical-and-illegal sector constitute the regulations of social obligation and encourage stability (i.e., clearly right or clearly wrong), while the legal-but-unethical and the ethical-but-illegal sectors give rise to the heroic individuals who question existing moralities, challenge the conscience

of a society (or industry or profession), and inspire the ongoing conversations about ethics and the law that keep a society (or industry or profession) dynamic and adaptive. Ethics joined to the law is morality as a push; ethics separated from the law is morality as a pull (see Figure 2).

According to this theory, corporate codes of conduct typically emphasize the push (i.e., guidelines and regulations) as opposed to the pull of morality (i.e., inspiring stories of individuals taking heroic action). (The pull of morality is ordinarily relegated to a list of the virtues to which individuals might aspire—a condition Bergson identifies as insufficient to elicit the emotions of a moral calling.) Corporate codes, given their regulatory emphasis, try to keep the individual inside the ethical-and-legal sector, implying that the individual is without power because all power comes from the regulating corporation. The employee's ethical obligation is thus to adopt the corporate code of conduct.

A code of conduct that includes the stories of heroic individuals, acknowledging both the push and the pull of morality, cultivates a dialogic relationship in which both the organization and the individual possess power (however unequal). The organization still has the power of regulation, but the individual also has the power of his or her courage and integrity, has the power to challenge practices that might be legal but unethical (e.g., the atrocities of "factory farming" operations) or to articulate actions that might be ethical but illegal (e.g., the distribution of medical marijuana), has the power to leave the ethical-and-legal sector (however briefly). Martin Buber (1937/1958) describes the dialogic relationship as I-thou: That is, to be ethical is to treat each other as a "thou" (a human being) instead of as a simple "it" (a thing to be utilized). The I-thou relationship encourages dialogue, while the I-it relationship allows only monologue (the authoritative I and the submissive it). In the I-thou relationship, mutual respect and genuine reciprocity of action are possible.

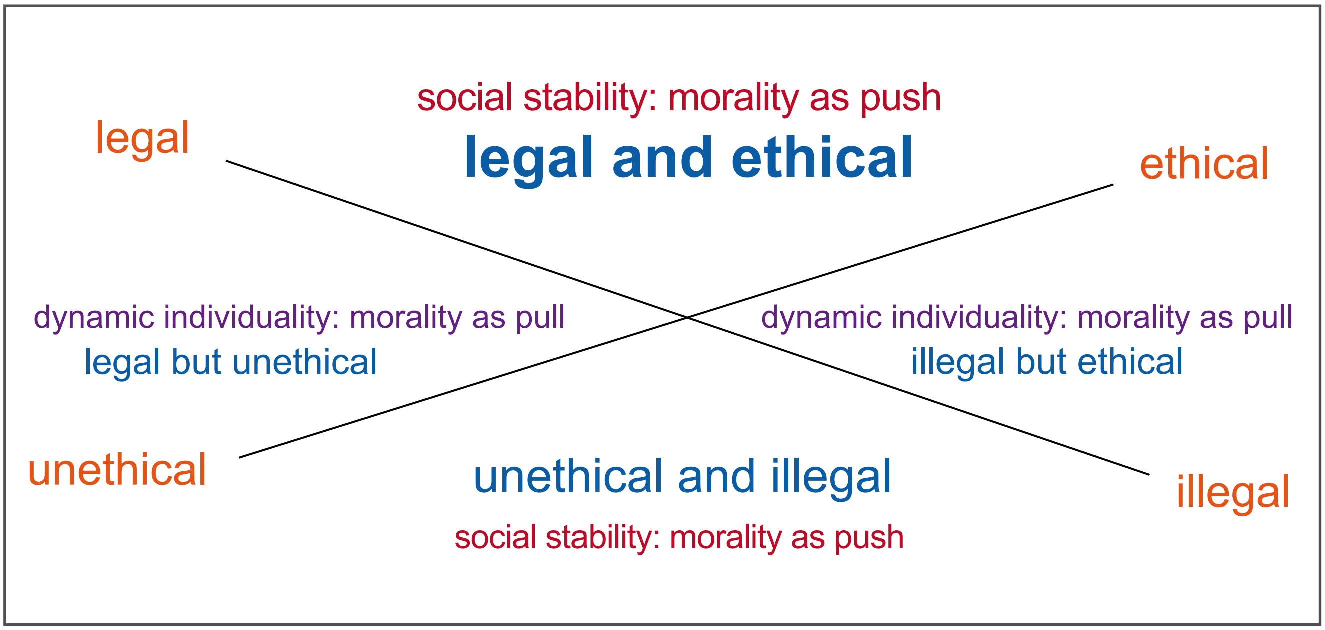

Figure 2. Legal-ethical relationships in corporate codes of conduct

Reading Codes of Conduct

In this section I offer a reading of corporate codes of conduct from the perspective of Bergson's theory of social and dynamic moralities. According to Ethisphere Institute's (2008) criteria, the highest rated corporate codes of conduct (among government contractors) are the following:

1. Verizon Wireless
2. Granite Construction
3. BP
4. Datapath
5. Sprint Nextel
6. Accenture
7. Pepsico
8. Cardinal Health
9. Rockwell Collins
10. Fluor Corporation

I will examine the codes of conduct of Verizon Wireless, Granite Construction, and BP—the three highest rated by Ethisphere and from corporations differing in size, history, and industry. Verizon Wireless (www.verizonwireless.com), established in 1999, operates in the communications industry and has about 86,000 employees. Granite Construction (www.graniteconstruction.com), established in 1922, operates in the construction industry and has about 5,000 employees. BP (www.bp.com), established in 1909, operates in the energy industry and has about 92,000 employees.

My comments focus on five factors that I propose could contribute to a dynamic I-thou relationship and encourage creation of dialogic codes of conduct: language emphasizing cooperation versus compliance, identification of authorship, clarity of ethical versus legal obligations, inclusion of humanizing pictorial images, and coverage of heroic individuals.

My reading emulates Farrell and Farrell's (1998) functional linguistic analysis of five corporate codes of conduct, which determined that specific conventions of grammar and diction (e.g., relational clauses, passive voice, nominalizations, imperatives) together "communicate a strong sense of obligation and even powerlessness since a strong authoritarian tone is established which does not give the addressees the possibility of discretionary decision making" (p. 587). Canary and Jennings (2008) reinforce this finding in their linguistic analysis of nouns and noun phrases in 23 corporate codes of conduct: "codes do not influence behavior because they are discursive instantiations of a system that does not encourage reflexivity on the part of the organization members in terms of ethical principles" (p. 276). In my reading of codes of conduct for their emphasis on cooperation or compliance, I will focus on the rhetorical as opposed to the strictly linguistic, and I will consider the impact of entire passages as opposed to individual words and phrases.

Also a key factor in generating a dialogic code of conduct is identification of authorship, both the participants and the process. That is, who contributed to the writing of this code of conduct, what were their sources and influences, how is the code periodically revised, and who contributes to the revision? Without this information, a code of conduct is the anonymous edict of the authoritarian corporation. Without this information, the individual is given no official opportunity to change or challenge the guidelines of the code of conduct. According to Schwartz's (2004) interviews of 57 individuals at four companies, "Employees should be involved in the process [of writing their code of conduct], not necessarily in order to gain their 'buy-in' or sense of ownership, but to help ensure a relevant and realistic document is produced" (p. 339). In a linguistic analysis of seven corporate codes of conduct, however, Long and Driscoll (2008) note that little or no attention is given to the subject of authorship.

In addition to emphasizing cooperation instead of compliance and identification of authorship, a dialogic code of conduct would clarify which of its guidelines were legal/illegal issues (and thus subject only to external revision) and which were ethical/unethical (and thus subject to internal revision). That is, if the individual is to recognize his or her location on the map of legal-ethical judgments (and the ability he or she has in time, energy, and resources to navigate this territory), the map itself ought to be readily available and easily deciphered. As Canary and Jennings (2008) note, however, in their analysis of 23 codes of conduct, "many areas covered in codes combine ethical and legal emphases" (p. 269). And according to Carasco and Singh's (2003) analysis of the codes of conduct of 32 transnational corporations,

12 never discuss the legal basis of their guidelines, 10 address it, 2 discuss it in detail, and 8 emphasize it, while 12 never discuss the ethical basis of their guidelines, 10 address it, 4 discuss it in detail, and 4 emphasize it. In a wider but earlier analysis of 75 corporate codes of conduct (Lefevbre & Singh, 1992), 51 never discuss the legal basis of their guidelines, 22 address it, 2 discuss it in detail, and 0 emphasize it, while 22 never discuss the ethical basis of their guidelines, 33 address it, 16 discuss it in detail, and 4 emphasize it. I consider this issue important because ambiguity here could generate timidity.

Following the Ethisphere Institute's practice, I also consider the impact of visual as well as verbal rhetoric in my reading of the codes of conduct. In research on ethics, I realize, this focus is relatively undeveloped. The Ethics Resource Center's (2003) 108-page manual, *Creating a Workable Company Code of Ethics*, for example, offers no specific advice regarding illustrations but encourages their inclusion as a usability issue: "Allow plenty of white space, reader-friendly fonts, and even pictures and graphics" (p. 29). The implication is that illustrations are supportive of words but never a substitute.

Illustrations are also briefly mentioned in a 2003 study by Pollach of the ethics section of six corporate websites that she considered representative of companies emphasizing business practices (BellSouth and Lockheed Martin), corporate social responsibility (Ben & Jerry's and McDonald's) or both (Nike and Levi-Strauss) in their ethics materials: "Graphic images are the paramount mechanism for appealing to the audience through emotions. Examples of such images include a picture of peacefully grazing cows on McDonald's page on animal welfare, or pictures of happy workers on almost all other Web sites" (p. 284). Illustrations here are identified as evocative of the ethical environment but never informative about principles and practices.

Nevertheless, noteworthy studies by Barton and Barton (1993), Dombrowski (2000), Dragga and Voss (2001, 2003) Henderson (1999), Lancaster (2006), Manning and Amare (2006), and Sauer (1993, 1994, 1996, 2003) acknowledge that illustrations might be designed in ways that communicate greater or lesser humanity, sensitivity, or subjectivity—that no illustration can be said to be entirely objective, that illustrations possess the rhetorical power to contribute to a vigorous sense of ethics and morality.

Studies of visual rhetoric, including visual-verbal relationships (e.g., Barton & Barton, 1987; Brasseur & Thompson, 1995; Dragga, 1992; Fan, 2006; Horn, 1998; Kostelnick & Hassett, 2003; Kress & Van Leeuwen, 1996, 2006; Schriver, 1997;) also make clear that visual communication is potentially every bit as informative and persuasive as it is decorative, and potentially every bit as rhetorical as verbal communication. Gerde and Foster (2008), for example, specifically encourage the adoption of comic books (graphic novels) to teach ethics in high school and college classrooms because the integration of words and pictures humanize the subject, elicits emotional and rational readings, and supports both visual and verbal learning styles.

A final factor in my reading is the inclusion in the code of conduct of stories or anecdotes of heroic individuals who tried to do the right thing, who raised questions about unethical laws, who challenged unethical policies or practices, who put aside profits for the public good, who exemplified moral courage. (For example, in 1987, Dr. P. Roy Vagelos, chair of Merck and Co., decided to give the pharmaceutical company's unique medicine for onchocerciasis, or river blindness, to victims and potential victims worldwide at no cost till the disease itself could be eradicated: The program has saved millions of eyes and is ongoing.) This narrative material has the potential to inspire ethical behavior (Macintyre, 1981). It is also readily memorable, especially relative to lists of rules and regulations. And in many cases on the job, the individual has little or no time to review the corporate code of conduct or visit with a superior or deliberate extensively: He or she might have 30 seconds to make a decision, and a quick guide is to ask "How would [a person in my corporation/industry/profession I admire for his/her integrity and good judgment] manage this situation?" Knowing the stories of the heroes of the corporation, of the industry, of the profession, might allow a quick answer to this vital question (Dragga, 1997).

My analysis as trained critic and interpreter is obviously tentative and subjective: I am necessarily influenced by my previous research regarding ethics (e.g., 1996, 1997, 1999, 2001, 2003) as well as by my detailed inspection of scores of codes of conduct. While

I am thus unrepresentative of individuals reading codes of conduct, I would also note that my objective here is to claim only the plausibility of my interpretations (verified through public presentation of this research) and thus to identify salient issues for possible later comprehensive studies (including surveys, interviews, ethnographies, and usability testing).

Verizon Wireless

The Verizon Wireless (2008) code of conduct is 40 pages. It includes no pictorial images, limiting itself to words to stipulate and inspire ethical behavior. It makes no mention of heroic individuals. Initially the code of conduct looks promising of a collaborative and dialogic environment. Following the cover, page ii is titled "WE ARE VERIZON WIRELESS" and includes a series of "we" assertions:

> We respect and trust one another, communicating openly, candidly and directly since any other way is unfair and a waste of time. We don't need witnesses or paper trails to our conversations. Our word is enough. We voice our opinion and exercise constructive dissent, and then rally around the agreed-upon action with our full support.

This emphasis on collaboration—on the company as "we"—is reinforced in the president's message on page iii: "Our Code of Conduct is a guide to help us conduct all of our business activities with the highest standards of integrity."

This promising introduction, however, immediately gives way to a focus on compliance. The origins of the code of conduct are never identified: Nothing is mentioned about how it was written or who participated in its writing. Nothing is said about how it might be revised or who might participate in its revision. The only thing said is that it "has been approved by the Audit Committee of the Verizon Board of Representatives" (i.e., officers and executives). The dialogic environment that I earlier imagined as generating this code of conduct here looks less and less likely, and later vanishes altogether as a note on the same page, displayed in bold italic type, declares,

> This Code sets forth policies and practices regarding the conduct of all Verizon Wireless employees. You are required to comply with the Code as a condition of your employment. This document does not provide you with any guarantee of continued employment at Verizon Wireless. Unless covered by express written employment agreement, all employees of Verizon Wireless are employed on an "at will" basis. This means you or Verizon Wireless can end the employment relationship at any time with or without cause, and without prior notice, for any reason not prohibited by law. This Code may be unilaterally modified by Verizon Wireless at any time.

In this heavy-handed fashion, Verizon Wireless makes a shift from the company as we to the company versus you. Verizon Wireless is separate from you; it composes and revises the code of conduct without your cooperation. Your only obligation is compliance. This emphasis is sustained through the remainder of the code of conduct. Only on the final page, titled "Verizon Commitment and Values," is the sense of the company as we revived through a new series of "we" assertions: for example, "We take responsibility for our actions as individuals, as team members, and as an organization. We work together, support one another, and never let the customer—or our coworkers—down."

Verizon's code of conduct also includes passages that leave unclear which of its directives are legal issues and which are ethical issues. For example, on page 32, a list is introduced as "examples of actions considered illegal or unacceptable" without specifying which are which. A company that was truly serious about encouraging "constructive dissent" would specify which practices were legal/illegal (and thus subject only to external revision) and which were ethical/unethical (and thus subject to internal revision). Mixing the two together gives the impression that compliance with Verizon policies is the same as compliance with national and international laws and thus discourages conversation about the merits of specific guidelines.

Verizon's code of conduct periodically includes a question and answer in the margin. The inquiries focus exclusively on the interpretation of specific policies and never question the propriety or efficacy of the policies. The individual asking the question is characterized as unknowing, and the company has all the answers. This is monologue disguised as dialogue.

To summarize, while the Verizon Wireless code of conduct makes early efforts at creating a collaborative and dialogic environment, it ultimately sacrifices cooperation for compliance and chooses a monologic I-it relationship in which it is permissible to ask questions but inconceivable to question the guidelines or participate in their writing or revision.

Granite Construction

The Granite Construction (2008) code of conduct is 27 pages. It includes two pictorial images. On the cover is a sepia-toned photograph, from the company's early history, of seven workers unloading a dump truck, on which have been laid individual color photographs of three contemporary workers and the caption "We Build Character: Over Eight Decades of Building Character." On the following page, adjacent to the president's message, is a photograph of the president and his dog. Together the images emphasize the history, humanity, and equality of the people at Granite Construction. This impression is reinforced in the president's message:

> Our Code of Conduct, while rich with tradition, is regularly reviewed by a team of Granite employees to ensure that it continues to address current challenges and issues. As in the past, our eight ethical Core Values are found to be timeless, appropriate to any situation. Changes in legislation make periodic revisions necessary for the compliance section of the Code. These modifications, along with some strengthening of our Core Values language has brought our Code up to date, and it should be read and acknowledged by every Granite employee.

Here the historic origins of the code of conduct are implied and the process of revision explained. (Inclusion of a note that detailed this review committee's membership and operations would heighten the opportunities for genuine dialogue.) This sense of collaboration is sustained through the remainder of the president's message and mitigates the language of compliance:

> As a condition of your employment, please read, understand and then sign the *Certification* found at the back of this document and submit it with your I9, W4 and any other required documents on your first day of employment. As you aspire to live the values and policies expressed in this document, you may discuss any questions you have with your supervisor or manager. I am fully committed to working with you to create this legacy for future generations.

Immediately following the president's letter, Granite identifies its heroic individuals, though without pictorial images:

> Our founding fathers, Walter Wilkinson and Bert Scott, were hardworking, resourceful entrepreneurs who measured their own character and conduct by how well they applied the simple belief, "Do unto others as you would have them do unto you. . . . Today, the "Golden Rule" remains the cornerstone of Granite's Core Values as we continually strive to integrate its practice with our goal of rewarding careers, building individual character, and growing a respectable and profitable business.
>
> Honoring and maintaining our predecessors' high standard of conduct will help ensure that all stakeholders will be well served and Granite's highly regarded reputation and integrity will be preserved.

It also explains here that the code of conduct has two sections:

> The Code of Conduct consists of two sections: Core Values and Compliance Guidelines. Our Core Values are part of our heritage and are fundamental to who we are as an organization. Core Values are the basis for our decision-making. The Compliance Guidelines address some specific areas of concern, either due to the Company emphasis or legal requirements.

In spite of a decided emphasis on compliance (14 pages of compliance guidelines versus 2 pages of core values), the remainder of the code of conduct ordinarily supports the sense of the company as we (e.g., on page 5, "Each of us has a responsibility to help assure that our Company always does the right thing and complies with

the law.") but does from time to time, as also on page 5, adopt language that divides us from the company:

> The Company is subject to federal, state, and local laws and regulations. Management is committed, not only to following the letter of these laws, but also the spirit. Beyond this, however, we are also committed to acting ethically. Following are some of the areas that apply to the Company and its directors, officers, and employees. Our Code does not cover everything you need to know about your conduct as an employee. It is, however, a cornerstone for our commitment and a reference for other policies that provide more specific information.

Granite's code of conduct does a good job of separating the legal from the ethical, typically by mentioning that applicable laws direct specific practices and behaviors (e.g., antitrust laws, securities laws). On page 11, however, the guidelines regarding "intellectual property" make no mention of their legal basis:

- We respect the rights of others who have created written materials, software, and other "intellectual property." Only copy documents and other materials when the Company has the right to do so.
- Company computers may only contain software for which the Company holds an appropriate license.

Given the collaborative spirit that seems to inspire Granite's code of conduct, it is surprising that it closes with a graceless emphasis on compliance. The Code of Conduct Certification on page 23 adopts the language of the company versus you:

1. I will deal fairly and ethically with Granite and on Granite's behalf in all matters and at all times proactively promote ethical behavior.
2. I will avoid actual or apparent conflicts with Granite's interests.
3. I will not a) take for myself personally opportunities that are discovered through the use of Granite property, information or position; b) use Granite property, information or position for personal gain; or c) compete with Granite.
4. I will protect Granite's assets, and promote their efficient and legitimate business use.

Consider, for example, the impact of a simple word substitution on the sense of cooperation:

1. I will deal fairly and ethically with our company and on our company's behalf in all matters and at all times proactively promote ethical behavior.
2. I will avoid actual or apparent conflicts with our company's interests.
3. I will not a) take for myself personally opportunities that are discovered through the use of our company's property, information or position; b) use our company's property, information or position for personal gain; or c) compete with our company.
4. I will protect our company's assets, and promote their efficient and legitimate business use.

To summarize, the Granite code of conduct tries to build a collaborative and dialogic environment and the foundations of a genuine I-thou relationship, but sporadically sacrifices the spirit of cooperation to the language of compliance.

BP

The British Petroleum (2007) code of conduct is 84 pages. It makes no mention of heroic individuals. It includes two kinds of pictorial images: a single photograph of the chief executive and scores of drawings, usually of people—and usually in silhouette—meeting, talking, working on computers, operating equipment, and so forth. This inequality in the display of human beings (the personalized boss versus the impersonalized masses) implies a monologic, I-it relationship. Nevertheless, the chief executive's letter on page 1 does make every effort to establish a spirit of collaboration by using "we" assertions (e.g., "If our company is to thrive and grow, we need the trust of

our customers, investors, employees, the communities in which we work and, at a wider level, the societies of which we are part.") as well as by emphasizing equality (e.g., "The BP code of conduct sets out our standards for everybody who works for BP. The code is obligatory, without exception. Everyone in BP is accountable for upholding its requirements.") and by inviting candid conversation (e.g., "The underlying philosophy of the code is that there should be no gap between what we say and what we do. A crucially important element of this is the commitment to an open culture where people feel secure in seeking advice and in raising concerns.")

Almost immediately, however, the dialogic gives way again to the monologic. On page 4 the origins of BP's code of conduct and the process of its revision (including who did or might participate) are unexplained: "The code is not entirely new – it updates, revises and summarizes, in one universal framework, BP's standards for employee conduct, helping us to act consistently with group values." And the serious restrictions on "raising concerns" are made evident on page 7:

> You must report any breaches or potential breaches of BP's compliance and ethics commitments of which you become aware—whether these relate to yourself, direct reports or others.
>
> You must similarly seek advice if you are ever unsure about the proper course of action.

That is, "raising concerns" is entirely about reporting violations or getting advised: It is never about questioning the code of conduct itself or contributing to its revision.

The code of conduct does, however, ordinarily make clear which practices are dictated by BP policies and which might be subject to national or international laws. For example, consider this page from page 24 on the subject of privacy and confidentiality:

> BP is committed to respecting the confidentiality of our employees' personal information. It is BP policy to acquire and retain only employee personal data that is required for the effective operation of BP, or that is required by law in the places where we operate.

A grievous exception, however, is the following passage a page earlier that makes no mention of the possible applicable laws:

> At BP, we believe every employee is entitled to fair treatment, courtesy and respect.
> BP will not tolerate any form of abuse or harassment, in any company workplace, toward employees, contractors, suppliers, customers or others.

The inclusion of sample questions and answers at multiple points in the code of conduct simulates dialogue: the questions are all about the meaning of BP's guidelines (never about their merits) and the answers are supplied to the unknowing questioner with the thoroughgoing expectation of his or her compliance.

The spirit of collaboration also yields to a decided shift in language from the company as we to the company versus you. For example, consider this passage from page 5:

> The code is the cornerstone of our commitment to integrity. It is a starting point. The code cannot describe every law, regulation or BP requirement that may apply to you. The company has additional standards, instructions and processes to further implement the principles in the code. Make sure you know the rules that do apply to you.

To summarize, in spite of repeated (but inconsistent) efforts at a collaborative and dialogic environment, the BP code of conduct, through both words and pictures, establishes a monologic I-it relationship that emphasizes compliance instead of cooperation.

Implications for Research and Teaching

I acknowledge that the materials of the three companies could easily be unrepresentative, but the evidence here is enough to raise questions about wider industry practice and justify a comprehensive examination. None of the companies truly exploit the immense rhetorical power of narrative or illustrations in their codes of conduct. None exclusively emphasize cooperation or

entirely specify authorship. None are altogether lucid or consistent in separating legal and ethical issues. None of the companies appreciate both the push and the pull of morality, both ethics as regulation of cooperative individuals and ethics as inspiration by heroic individuals. Granite Construction does a better job than Verizon or BP, however, and it thus makes obvious the feasibility of a dialogic code of conduct.

While the rhetorical privileging of cooperation, the inclusion of information about authorship, the clarification of ethical versus legal issues, and the addition of heroic narratives might be simple repairs, the primitive usage of illustrations is fairly disquieting, especially in this age of readily available and easily incorporated digital images, in this age of rising expectation that information is almost always communicated both visually and verbally. I imagine, however, that this failure has less to do with a technical inability to incorporate visual images and more to do with a ubiquitous perception that codes of conduct are necessarily all about the words. Given the regulatory emphasis of typical codes of conduct and their equation of legal and ethical behavior, developers of codes of conduct likely perceive themselves as writers of regulations instead of communicators of ethics and come to the project thinking everything in the code of conduct must be verbalized According to this thinking, illustrations might be incorporated to fortify words, but themselves do little to stipulate, clarify, or encourage ethical behavior or generate the dialogic ethical environment that inspires ethical behavior. Consider, however, the rhetorical power of photographs of supervisors and subordinates in conversation with each other (instead of smiling at the camera); or of employees reading and discussing the corporate code of conduct; or of the code of conduct being written or revised; or flow charts with pertinent pictorial images that explain the process for writing and revising the code of conduct and the process for questioning or challenging specifications in the code of conduct; or line graphs that identify the frequency of specific kinds of ethical dilemmas reported in the previous five years (i.e., the likeliest dangers to the company's reputation and integrity) linked to a representative sampling of photographs and quotations of the courageous employees who reported the dilemmas. Each would contribute to a sense of ethics as a joint mission and the code of conduct as a collaborative and ongoing project.

Obviously, a lot of questions about corporate codes of conduct are still unanswered, but multiple directions for research are quite promising:

- How might usability research contribute to identifying the rhetorical (and linguistic) traits in codes of conduct that inspire cooperation instead of compliance? Which are the key rhetorical (and linguistic) traits of cooperation? Which are the key rhetorical (and linguistic) traits of compliance?
- Would surveying (or interviewing, or observing) a representative sampling of developers of codes of conduct offer insight on why illustrations are given little substantive import, why authorship information and heroic narratives are omitted, or why ethical and legal issues are mixed together? Who are the developers of codes of conduct? Writers? Artists? Business managers? Legal advisors? What is the nature of their education? What is the nature of their rhetorical and ethical training? What are the key issues for each in developing codes of conduct? How collaborative or dialogic is this creative process?
- What are the possible ways that narratives or illustrations could be utilized in codes of conduct? To address do's and don'ts (e.g., do be friendly, don't be flirtatious)? To depict specific virtuous actions that the company has taken or is taking (e.g., recycling its papers and plastics at all locations)? To depict specific ethical issues that the company has addressed or is addressing (e.g., creating a safe and healthy work environment)? To depict specific ethical individuals? To separate ethical from legal issues?
- Would publishing codes of conduct in a picture-intensive but unconventional medium (e.g., comic books, playing cards, wall calendars) offer "unexpected solutions to such problems as delivering information to remote populations or communicating with inattentive or resistant audiences" (Malone, 2008, p. 59)?
- How might pictorial images in codes of conduct be translated/localized to accompany translations/localizations of language?

- Would surveying (or interviewing, or observing) a representative sampling of employees reveal that codes of conduct that separate ethical and legal issues or include narratives, illustrations, or authorship information are more likely to be read? Easier to read? Easier to remember? More inspiring? More persuasive? More instructive?
- Which theories of rhetoric, semiotics, and ethics would be especially perceptive and productive in the analysis of codes of conduct?

And as much as there is to do in research, there is also a good bit of better teaching to do. Teachers of technical communication are still failing, for example, to inspire in their students the kind of comprehensive visual thinking that all of us acknowledge is important (Brumberger, 2007a, 2007b). This failure has ethical consequences, with obvious impact on the way codes of conduct are conceived and developed. It is a key ethical issue for the field as well as a pedagogical imperative.

We could, however, teach (and lead) by example. We could take the guidelines of STC and develop revised versions that include the rhetorical power of narrative and visual communication and that identify the contributors to this revision. We could engage graduate and undergraduate students in this initiative as class projects; we could engage each other in this initiative as a national competition. We could advance the cause of ethics if we make STC's code of conduct itself a leading example of effective dialogic communication.

Consider, for example, the six ideals of STC's ethical guidelines: legality, honesty, confidentiality, quality, fairness, and professionalism. Each of the six is explained and detailed in a paragraph, but how might pictorial images or narrative material contribute to their meaning? Give each clarity and specificity? Make each important and necessary? As Bergson (1954) has explained, only heroic human beings inspire in us the genuine feeling of a moral calling. Notice, however, that each of STC's ideals in its strictly verbal display is disembodied, separated from the human beings who give life and material to morality. A series of photographs of heroic practitioners of each ideal (with a brief caption telling their stories) would intensify the rhetorical power of STC's guidelines by making vivid the feasibility of ethical behavior. The photographs and narratives could be readily localized to each chapter of this international organization, thus making the guidelines especially pertinent and immediate.

If we consider ethics a vital subject of teaching and research, we ought to investigate how to intensify the rhetorical impact of the ethical guidelines we espouse. And we might take responsibility for developing corporate codes of conduct that emphasize cooperation instead of compliance, that separate ethical and legal issues, and that integrate narrative, illustrations, and authorship information. Studied in the principles and practices of ethical communication as well as collaborative verbal and visual communication, technical communicators could be uniquely qualified to develop dialogic codes of conduct for their corporations, industries, and associations—codes of conduct that would comprise the push and pull of morality, that would both stipulate ethical behavior and inspire it.

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Organizational Training in Japan: A Case Study of the Spaces of Localization

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Abstract

Purpose: The case study described in this article explores a U.S. team's adaptation of organizational training for Japanese audiences, with a particular focus on the team's management of social and physical spaces in which the training took place.

Method: Qualitative research was used in this study, specifically a case study based on ethnological methods including interviews, observations, and collection of relevant documents.

Results: Localization of the social and physical spaces that surround organizational training spaces includes recognizing their potential function as an important site for professional communication, especially in relationship-oriented cultures such as Japan. Beyond the need for this conceptual understanding, localization of organizational training also requires the practical navigation of these spaces. Such facility depends on professional communicators' understanding of proxemics, or the human use of space in cultural contexts, as well as wise reliance on the guidance of cultural insiders.

Conclusions: When professional communicators work to localize organizational training, they must include all relevant communication channels and work to actively manage the physical and social spaces through which relationships are built and information is passed. An awareness of how space is used as a means of communication across cultures is essential.

Keywords: relationships, proxemics, organizational training, localization

Practitioner's Takeaway:

- In many cultures, interaction within social spaces is a vital communication channel in organizational training.
- Professional communicators must recognize the importance of these sites and learn how to act interpersonally within them.
- The study of the use of space across cultures, also called proxemics, is critical for professional communicators, as is the ability to collaborate with cultural insiders.
- Practical limitations in the absence of face-to-face interaction in global professional contexts such as Japan must also be recognized.
- Continued development of theory related to the use of space in organizational training is needed.

Introduction

Relationship building is an essential process of organizational training in business cultures such as Japan, where it predominates over information sharing as a primary purpose of professional communication (Yamada, 2002). Where the aim of relationship building tends to encourage face-to-face interaction in professional communication, as it does in Japan, the skillful management of the various social and physical contexts where interlocutors meet is a must. Clearly, these practices require a careful approach to the localization of organizational training, localization being the "process of creating or adapting an information product for use in a specific target country or specific target market" (Hoft, 1995, p. 11). Yet, to date, very little of the literature has focused on the professional communicator's management of physical and social spaces in the localization of organizational training and similar types of professional communication across cultures.

This article reports on research that worked to address this gap in the literature: a case study of a team's adaptation of a training program for Japanese audiences. Findings reveal communication in social spaces to be a vital counterpart to formal organizational training in Japan. The professional communicator's understanding of proxemics, or the navigation of space across cultures (Hall, 1966), is shown to be crucial, as is the related ability to collaborate with cultural and linguistic insiders. The practical limitations of professional communication in the absence of face-to-face interaction are also suggested. Finally, the study suggests the need for continued development of theory related to the navigation of physical and social spaces in organizational training.

Literature Review

The boundary between professional and social spaces is typically clear in low-context business cultures such as those in Germany or the United Sates, where meaning is contained primarily in the message itself (Hall, 1976). In such cultural contexts, scholarship focused on designing and giving effective presentations (such as Abela, 2008; Duarte, 2008; Riley & Mackiewicz, 2010) may be sufficient to augment the localization of organizational training, particularly scholarship that includes a focus on presenting in international contexts (Alley, 2003; Hager & Scheiber, 1997). However, in many high-context cultures of Asia and Latin America, where meaning is communicated primarily through the context surrounding the message, professional communication commonly occurs through channels outside the formal information product (Hall, 1976; Honold, 1999; Thatcher, 1999; 2006; Yamada, 2002;).

For this reason, physical and social spaces can be an especially important venue for organizational trainers to build relationships and exchange information with colleagues and audiences. Kim (1999) suggests that the localization of organizational training cannot be limited to the formal training presentation only. He proposes a system of what he calls the "transcultural customization" of training, or the transfer of a training program from one culture to another. Kim attempts to addresses complex issues, such as how the type of training to be undertaken can affect its adaptability for another culture (for example, hard- versus soft-skills training), whether the content itself needs to be changed, and how team roles are best defined (subject matter experts, cultural subject matter experts, customization specialists, translators, etc.). Kim hints at the importance of high-context communication in this process but does not address it specifically: "The transfer of learning in real life is not just a matter of the quality of the course or the achievement level of participants during the class. The work environment and system should support the transfer of learning" (p. 106). McClay and Irwin (2008) also note this necessity in their handbook on training global audiences; yet they do not fully explore the human use of space across cultures as it applies to organizational training.

Intercultural communication scholars have long pointed to culture as a strong influence on the human use of space. Edward T. Hall, an anthropologist and one of the founders of the study of intercultural communication, uses the word "language" to describe all patterns through which humans communicate, as reflected in the title of the book *The Silent Language* (1959). From this premise, Hall established the well-known concepts of high- and low-context communication (1976) and monochronic and polychronic time (1959). Hall (1976) broadens the

study of communication from simply "how people express themselves (including shows of emotion)," to "the way [people] think, how they move, how problems are solved, how their cities are planned and laid out, how transportation systems function and are organized, as well as how economic and government systems are put together and function" (pp. 16–17).

A natural application of the concept of high-context communication to organizational training is the study of the human use of space across cultures, or proxemics (Hall, 1966). Hall defines proxemics as "the interrelated observations and theories of man's use of space as a specialized elaboration of culture" (p. 1). Hall (1966) notes cultural differences in the use of space in several areas: the typical distance between individuals engaged in conversation, the typical social spaces in which interlocutors feel comfortable communicating, and the typical boundaries of public versus private space. Individuals are largely unaware of these differences in their own contexts because their own cultural practices have become naturalized (Hall, 1976). Other scholars have followed up on Hall's study of proxemics with a closer look at how it might apply in fields ranging from architecture (Lawson, 2001) to social psychology (Patterson, 1983) to environmental psychology (Aiello, 1987) to human communication studies (Burgoon, Buller, & Woodall, 1996). Yet, the field of professional communication has been slow to examine physical and social space as an important facet of global professional communication contexts.

Some professional communication research has traced the contrasting uses of space in the American and Japanese workplace contexts to underlying cultural values. Yamada (2002) notes that American business tends to emphasize the individual. She points out that the format of a typical American business meeting is one where the participants report on their accomplishments. Japanese business meetings, in contrast, tend to emphasize collective, familial interdependence. Likewise, Yamada notes a contrast in the way offices are set up in Japan: "Instead of dividing office space into individually bounded rooms or cubicles [as is done in the United States] . . . it is left open, in a bullpen" (p. 56). This idea is carried over into the Japanese manager's role: to foster "an environment in which employees perceive themselves as working together for a common goal" (p. 56). The ideal American manager, by contrast, creates what is often called a "level playing field" for individuals (Stewart & Bennett, 1991; Yamada, 2002).

Despite the potential usefulness of such research, the field's understanding of the use of space across cultures is still not well understood in the context of organizational training. Important questions include the following: What role does interaction within social spaces play as a counterpart to formal organizational training? How can professional communicators act interpersonally within these spaces? How can professional communicators effectively collaborate with cultural and linguistic insiders? What theories can be developed in the field of professional communication that are responsive to the cultural complexity of managing the physical and social spaces of organizational training? What are the practical limitations of professional communication when face-to-face interaction is limited, as it is in online contexts? How do the fundamental principles of professional communication relate to the use of space across cultures? In pursuing answers to these questions through research, Hall's (1976) argument that the most taken-for-granted aspects of culture are often the most influential is instructive.

Methods

While indicating the need for an exploratory approach, the gaps identified in the review of literature are also relatively specific, suggesting qualitative case study as a research method (Flick, 2002; Miles & Huberman, 1994; Sullivan & Spilka, 1992; Yin, 1994). As elements of the case study, ten audio-recorded interviews were conducted with the three team members, and relevant documents were collected. Team planning meetings over a period of three months were observed, along with several days of training presentations in Japan. Triangulation was used in data gathering and analysis throughout the study. In addition to being an effective research strategy, triangulation was important in mitigating bias (Flick, 2002) because I gained access to the site through one of the participants, who is also related to my wife. Other practices common to qualitative research were also used in the case study, such as protecting participants' anonymity and asking participants to review research findings (Flick, 2002; Yin, 1994). Details of the research process are described below.

Case and Participants

The case was focused on the creation and delivery of face-to-face training in Hawaii and Japan, much of it done with the use of PowerPoint, to groups of about 40 people. The training team described in the case study regularly delivers sales and management training in Asia for a U.S. food company that has annual sales of approximately $400 million. The case began with the training team's first planning meeting in Honolulu and ended with the audience feedback they received following the delivery of training, approximately three months later. This case took place within the larger cycle of training that had been going on for more than five years on a roughly quarterly basis.

The training team was made up of three members. The first participant was a Japanese man named Hiroshi (pseudonyms are used for all participants), in his late thirties, who was not only bilingual but also bicultural, having grown up in both Japan and the United States. The second participant, Keiko, was a Japanese woman in her mid- to late thirties who had moved to the United States as an adult, where she operated her own English-Japanese translation company for several years. The third participant and training team leader, Bill, was a Chinese-American man in his fifties who spoke English as a first language and Mandarin Chinese as a second language. Bill and Hiroshi had been developing and delivering training seminars for Japanese audiences together for about five years, and Keiko had been a part of the team for four years.

Data Gathering and Analysis

Using the team's three-month training cycle as the boundary of the case, I observed the development of a sales training seminar over a period of two-and-a-half months, from the planning phase in Honolulu to the delivery of the training in Japan (four full days). My primary means of data gathering were observing planning meetings, interviewing participants, collecting documents including PowerPoint presentation slides, and observing training seminars and social events. Planning meetings took place primarily at the beginning of data gathering; training seminars and related events took place towards the end. Throughout the process, I conducted a total of ten formal interviews, five of them in a group format with the three training team members. My main purpose in these interviews was to check what I thought I was observing in the planning meetings and learn more about it.

Data analysis was an iterative process that occurred throughout the data-gathering phase of research beyond. Analysis of interview transcripts, observations of planning meetings and training presentations, and analysis of relevant documents were performed using open and axial coding (Flick, 2002). Open coding applied to lines of text, sentences, paragraphs, and whole texts. All of these levels were important given the wide range of data types and the varying degrees of importance in the data gathered. Codes were then abstracted into categories, followed by axial coding, which refined the categories. Feedback on coding was sought from other qualitative researchers to aid in researcher triangulation. Themes and concepts emerging from qualitative data analysis were evaluated and given to research participants for feedback (Flick, 2002; Yin, 1994), resulting in some slight modifications to findings. The following sections discuss findings related to the social and physical spaces of the organizational training.

Findings

Findings confirmed and elaborated on the team's integration of social and physical context with localization. The team members defined the boundaries of the training—and the corresponding boundaries of localization—more broadly than just PowerPoint slides accompanied by oral communication. To them, a truly radical localization for the Japanese audience maximized attention to the physical and social spaces surrounding the training while also carefully shaping the text and form of the training seminar itself (Melton, 2008; 2009). This approach fit well with the high-context business culture of Japan (Hall, 1976; Victor, 1992; Yamada, 2002). Findings related to the use and management of physical and social spaces are described in the following sections: high-context communication and space; relationships and trust; communication in social contexts; and the rhetoric of space.

High-Context Communication and Space

The team members recognized that much of the communication between training team and audience

took place through channels outside the formal training. In a related vein, they were aware of different goals for communication: The team members emphasized the importance of building and maintaining strong relationships as integral and a priori to the successful exchange of information, in this case the training presentation.

To appreciate the communicative aim of relationship building in Japanese business, it is necessary to understand the organizational and cultural context in which these relationships are built and nurtured:

> The superficial structure of a Japanese company may seem no different from an American one. The difference is in the effect of the structure on internal relationships: Japanese employees really act as if they are family members who count on each other and the organization to take part in or organize various aspects of their personal lives. This is in part why Japanese business relationships extend far beyond the regular workday—late-night drinking and rounds of golf are seen as part of work. It also helps explain why Japanese companies don't have job descriptions. Just as your role in the family is implicit and unwritten, so too is your role at work: Business is family. (Yamada, 2002, pp. 54–55)

In contrast to the information product—the document or presentation—being the place where the professional communicator contributes value (Faber & Johnson-Eilola, 2002), value was created in the relationships that were formed, built, and maintained.

Relationships and Trust

A recurring theme in this study was the importance of personal relationships to the team's communication, both within the training team and between the training team and their associates in Japan. To understand this idea, one needs to be aware of the different ways in which relationships tend to be conceptualized in the United States and Japan. Yamada (2002) explains that while independence is assumed to be a healthy basis for both personal and business relationships in the United States, interdependence is the ideal for relationships in Japan. To explain this interdependence, she draws upon the Japanese concept of *amae*:

> Defined originally by [psychiatrist] Doi [Takeo] as the reciprocal feeling of nurturing concern for and dependence on another, in practice, there is one interdependent who indulges himself in the amae (*amaeru*), and another interdependent who obliges (*amayakasu*). In this idealized mutual interdependence of "sweetening" and "being sweetened," both interdependents benefit, and like a mother and a child, form an affectionate bond . . . but amae (sweetness) is not only restricted to the relationship between a mother and a child. It is pervasive in a variety of relationships in Japan, extending to any combination of the sexes, and beyond what Americans might consider "personal" ones. Just as amae occurs between siblings at home, so it does too among men in the workplace. What's more, a person who knows how to look after others is commended as a *mendoomi ga ii hito* (a person who knows how to look after others well), a quality highly sought after in managers, and a person who knows how to amaeru (count on someone) is usually well thought of and well cared for. In both directions, amae (sweetness) is considered desirable in the right amount. (pp. 9–10)

Because this is how relationships tend to be approached in Japan, the question for this study was how were such *amae*-based, interdependent relationships built by the team members? As shown in previous articles, relationships were built between the team members in part through the translation process and between the team and the audience members through the formal presentation of the training seminar (Melton, 2008; 2009). To an even greater degree, as will be shown below, relationships were built outside of the formal training presentation.

The team members understood another cultural difference affecting the establishment of relationships: the different concept of leadership that shaped the team's efforts in Japan. Hiroshi drew on a historical contrast between the United States and Japan to explain the difference:

> From ancient times, there were very few people that had a leadership role . . . I guess you could consider lordship as leader[ship], but in America a leader is somebody who shows leadership, [who] becomes one, not necessarily the prince being born into the

> king's family . . . In Japan, he was absolute . . . and so the commoner[s] didn't have a leader within the commoner society. What they had were people who would mediate between people, and a mediator was considered a leader.

The awareness that Hiroshi demonstrates here is in line with scholarly histories of Japan, including Gordon (2003) and McClain (2002). Put in terms given by Hampden-Turner and Trompenaars (2000), Hiroshi is describing the difference between achieved and ascribed status and between inner-directed and outer-directed leadership.

As additional evidence for his point, Hiroshi pointed out that there is no Japanese word for *leader*, noting that the only word that can be directly translated as "leader" was imported from outside of Japan. He described the typical practice of Japanese managers to ask for input and build consensus for a decision with colleagues before a formal meeting takes place. He noted that this process allows the meeting to focus on logistics and implementation because the course of action has already been agreed upon. Hiroshi's description matches the findings of Yamada's (2002) study of Japanese business meetings, in which the actual meetings themselves were very formal, but informal communication played a key role in preparing the meeting beforehand. In Yamada's study, relationships were marked by hierarchy and an embrace of unequal distribution of power, also called power distance (Hofstede, 2004), but they were also tempered by *amae* and the role of leader as mediator. Yamada (2002) explains,

> [An] example of familiar interdependence is the Japanese manager's role in creating an environment in which employees perceive themselves as working together for a common goal. In section meetings, the manager draws the focus away from internally competitive and individualized aspects of the job, and refocuses the group on shared ventures, such as program planning, scheduling, and comments on proposals in circulation. (p. 56)

This culturally defined, nurturing, mediating role was important in the team's training efforts as well. For this reason, localization could not take place only in the formal training presentation; mediation and nurturing between training team and local associates were better performed in informal contexts. This process took place before and after the formal training presentation, in social spaces, which will be discussed in the following sections.

Communication in Social Contexts

Relationships and *amae* were built in large part by communication in social contexts, such as planning lunches and post-training recognition banquets, where the role of the mediator was evident. All of the team's training meetings in Japan included a dinner or banquet afterwards, which the team members said was standard practice for the team there but not in the United States. Bill said, "You don't pull into town, give a [training presentation], and just leave. We do that in the U.S. all the time. I mean, after the meeting's over [in the U.S.], if you wanted to go to dinner, you might go with somebody, but here [in Japan], it's a scheduled event." He explained,

> A lot of the relationships that are built, the decisions that are made, are done not in the training sessions, but informally . . . We go over issues, possibilities—you ought to do this and this.

The team members said social functions were actually more important than the training seminar itself because in an informal setting, audience members could ask questions or raise concerns that they would be reluctant to mention in the meetings (a tendency also noted by Yamada, 2002).

The team members recognized that the tendency of Japanese audience members to ask questions only in an informal setting stemmed either from the concern that they might lose face by asking an unintelligent question in front of everyone or, even worse, that they might make the presenter lose face by asking a question he or she couldn't answer. Hiroshi portrayed how the same conversation might play out in a social context:

> If there is some kind of misunderstanding that turns out to be a good question, but somebody doesn't have the answer, you wouldn't be embarrassing them in front of everybody . . . just within that [conversation]. And, some people might [say], "You're too drunk—you're asking the wrong

> question," and people just laugh it off and . . . save everyone's face.

Keiko confirmed that she had received good feedback about the after-event dinners because people "can relax and talk honestly [about] many things."

These statements align with Yamada (2002), who says that in Japanese business much of the important communication does not take place in formal meetings. Rather, conversations take place in social settings and through *uchiawase*, where "a boss calls upon subordinates to chat about a variety of informal topics" (p. 56). Yamada (2002) explains,

> The "sound-outs"on views and positions that take place in these short and frequent *uchiawase* meetings provide a major resource for the Japanese process of consensus decision building called *nemawashi* (literally, root binding). Together with other conversations that occur among workmates at every level throughout the work day, and in bars, restaurants, golf courses and other venues of entertainment, managers use *uchiawase* to sound out the feasibility of proposals that are currently circulating through the company. (pp. 56–57)

The same process occurred with the training: Because much of the real planning, teaching, and gathering of feedback occurred in such places as restaurants and bars, it was vital for the training team members to view them as integral to the training and to actively participate. Thus, a crucial part of the team's localization of the training was structuring events to allow the conceptual walls between formal training and informal conversation to become porous.

But it was not simply the act of scheduling social events that was important; the team members had to exercise the ability to fill in any gaps. Hiroshi explained,

> It won't help just going to eat. You need to kind of try to understand how he's feeling, but he might not tell you if he liked the meeting or not. He might have a smile and say, "That was good," but maybe he had reservations. And in some cases, you have to say, "Maybe I came on too strong at that point." And if that's [what] he was thinking, he would say, "Oh, you understand how I feel" . . . Then the truth will come out, so you need to be able to read the guy basically.

Here, Hiroshi explains how such social contexts facilitate information exchange, not through the reading of charts, graphs, survey, or other data, but through the reading of *people*. In a similar vein of being able to "read" someone, Keiko described the importance of relationships in U.S.-Japanese business communication this way: "The most important thing is to know the heart of [the] Japanese. It's very difficult." The social contexts provided an opportunity for the organizational trainers to, in a sense, learn about the audience's questions and comments and respond accordingly.

Keiko's articulation of this kind of knowing reflects a recognition of the contrast between specific and diffuse communication styles as portrayed by Hampden-Turner and Trompenaars (2000):

> Specific communication styles tend to be forthright, blunt, and confrontational. You "tell it like it is," "call a spade a spade," and hope that you will not cause offense. Diffuse communication styles are indirect—drop hints, and let the other interpret your full meaning. You "tread gently" and hope the implications of what you have indicated have been fully grasped. (p. 155)

Incidentally, Hiroshi noted that this kind of implicit communication becomes more difficult if done after a few drinks (a similar point is made about Chinese business contexts by Schapiro, 2009).

In any case, understanding the interplay between the formal business training context and the social context may be difficult for cultural outsiders who are not used to seeing social events as part of technical and professional communication. The purpose of this communication is not primarily to impart information, Hiroshi argued, but rather to establish a relationship: "The Japanese go out drinking a lot because they want to find out who you are . . . and they are most worried about who they're going to be associated with because society evaluates you in terms of who your friends are, your associates." Thus, professional communicators in international context cannot think only in terms of the product they produce, but must also consider the associations and relationships they are establishing and

how these efforts are perceived by their international associates. Such thinking requires a level of cultural awareness that may be impossible without advisors or collaborators who are cultural insiders.

The social settings also allowed for opening up the emotions. Keiko noted that in the formal training setting, people "just listen, and [they] sit like that." At this point, Keiko folded her hands on her lap and portrayed an attentive, respectful, but unexpressive demeanor. She explained that, by contrast, at a dinner or party after a training presentation "people [can] talk and ask any question, and then shake hands, and then hug. That's very important." All three participants noted that the dissipation of formality at social events allowed an opening up of the emotions. Informal situations provided a forum where the presenters and audience could connect with one another, in part because a more casual kind of communication marked by diffuseness rather than specificity was allowed (Hampden-Turner & Trompenaars, 2000).

Informal communication was particularly interesting in the case of Bill because, as a non-Japanese-speaking outsider, he wasn't able to fully participate in the conversation. However, as a clue to the extent of the diffuse nature of this communication context, Bill's mere presence as the senior member of the training team was very important in building relationships. The high-context act of a higher status individual being personally present was so important that in some cases it didn't really matter if Bill could understand the actual information that was communicated. Bill explained,

> We'll go [to Japan] and there will be meetings [where] I don't know what's going on. I'll sit there for five hours . . . and when it's important that I know something or they want some feedback, then they'll stop and they'll translate: "This is what we talked about. Now, what do you think? Do you have any ideas?" . . . But my presence is very important . . . because what I'm saying is, "I value you very much" . . . even if I don't know what the heck is going on.

This situation is not unlike the common practice of *inemuri*—literally "to be asleep while present"—as described by Steger (2003). The acceptance of this practice depends on the involvement required of the individual and the power dynamics of the situation. Subordinates are often expected to take care of the details, but the actual presence of the executive is required, even if he is not actively involved (Steger, 2003).

Bill explained why personal presence was so important for the team in Japan, while it was not strongly emphasized in the United States: "Yes, we've had training and, yes, people learn a certain amount, but they need to see you and they need to feel . . . your presence because this is a person-to-person culture." As an example, he noted that the country manager of the company had flown several hours to personally apologize when an important person was mistakenly passed over for an award. He contrasted this act with what would likely have happened in the United States in the same situation: a sincere phone call from the country manager, who would have apologized and offered to make it up at a later time. This instance is similar to David Victor's (1992) discussion of the importance of face-to-face communication in Japan, especially when that communication comes from a person with status in the organization. He notes an incident in which a Japan Airlines (JAL) plane crashed due to negligence on the part of the company. "Yet only one passenger sued the airline—not because the passengers would lose such a case under the Japanese system but, rather, because the president of JAL apologized in person to every family with a relative killed or injured in the crash" (p. 126).

For the team members, informal, contextual communication took place not only after the training but throughout the entire trip to Japan, including pre-training lunches with key colleagues. When I asked if there really was a contrast between the United States and Japan with respect to this practice, Bill said that although these kinds of business lunches are common in the United States, it would be acceptable for the team to omit a lunch meeting there but not in Japan. He explained that in Japan the implication would be that the colleagues were not worth the time and that their input was not important. Bill noted that pre-training meetings helped the team "adjust and adapt" the training to various audiences. The importance of these pre-meeting conversations has been noted by other Japan scholars and observers (Lost in Japan, 2006; Yamada, 2002).

The awards banquet was even more important. Bill noted that "we actually had more people that came to the recognition dinner than came to the training because that is so important." This is a significant point: If the importance of the recognition dinner can be measured against the training presentation by the number of people who attended, then the recognition dinner was the more important of the two. And, in fact, the participants confirmed that the dinner was more important. On several occasions—before and after the recognition dinner had taken place—the participants informed me that it was the most important part of the training. As part of my postanalysis check with the participants, I wrote that social events such as the awards banquet were "as important" as the formal training, but all three participants corrected me in their feedback and said they were more important.

The training process provided not just an opportunity for audience members to increase their knowledge and skills but also, through social events, to be recognized for their accomplishments. This recognition, according to the team members, was the highlight of the training for many people. Awards, based on sales accomplishments, were given in the form of Hawaiian leis, which had no real monetary value but rather a symbolic value, similar to other context-based signs of status . Although it was not a complicated matter to buy leis to recognize people, this detail was first talked about in a planning meeting six weeks in advance of the recognition dinner and before much of the training content had been decided. The team members not only realized that the recognition was important to the success of the training but also planned out how to act upon this belief well in advance.

If Japanese culture tends to be ascription- rather than achievement-oriented (Trompenaars & Hampden-Turner, 2000), why were the awards banquets so important? Going back to Japanese culture's tendency toward collectivism (Hofstede, 2004), particularism (Trompenaars & Hampden-Turner, 2000), and ascribed status (Trompenaars & Hampden-Turner, 2000), it was important for the audience members to receive their award in the presence of their peers in a particular context where emotion could be expressed freely, which ascribed a meaning and status to the award that would otherwise be missing. Through this process, not only were individuals rewarded for performance, but relationships between colleagues were strengthened. It is interesting to note that recognition was not done during the formal training presentation, although it could have been, but at a social event afterwards.

In pre- and post-training events, the content of the training was cemented by the social bonds that were developed in the social contexts surrounding it. The audience members did learn during the training, but this learning was enhanced and put into context through relationships built largely through face-to-face social events. These events were a forum for many activities: asking questions, adjusting training content and approaches, giving and receiving informal, face-saving feedback, expressing emotions to colleagues, being recognized for hard work and accomplishments, and feeling the personal presence of superiors even when language barriers prevented extensive conversation. In this way, the localization of the training was sublimated from the paper and pixels of formal training contexts into the social spaces surrounding them.

The Rhetoric of Space

Given the importance of relationship building that occurred in social spaces, a final, key area of practice for the team was navigating the rhetorics of space—what Hall (1966), calls proxemics, or the "use of space as a specialized elaboration of culture" (p. 1). Hall notes cultural differences in several areas: the typical physical distance between individuals engaged in conversation, the typical social spaces in which interlocutors feel comfortable communicating, and the typical boundaries of public versus private space. Individuals are largely unaware of these differences in their own contexts because their own cultural practices have become naturalized. Yet, global, professional communicators need to be aware of these differences because how space is used—whether intentionally or unintentionally—can send a strong message to an audience.

The participants recognized the importance of proxemics and chose carefully where they and other people were placed both in training and social contexts. Physical proximity reflected not only high power distance (Hofstede, 2004) but also ascribed status (Hampden-Turner & Trompenaars, 2000), as reflected in this statement by Hiroshi: "It's so important in Japan . . . who you sit with, who you take a picture with—that is still [true] today." Thus, in the formal context

of the training seminar, team members followed the practice of seating audience members in the appropriate places in the room according to their status, based on professional title, experience, and age. The intricacies of these processes were difficult for me to understand as a cultural and organizational outsider, but I did observe the process happening and saw a contrast with the more casual seating at the team's training seminars conducted in the United States, where people usually chose their own seats, reflecting assumptions of individualism and equality. While in Japan, I became accustomed to a observing a slight pause before people were seated at a dinner, a training seminar, and even when getting into a car, as silent proxemic calculations based on relative social status were performed. Thus, at training-related lunches and dinners, there was literally a proper place for everyone at the table (Yamada, 2002).

Nonverbal cues, defined according to a culturally defined hierarchy, maintained the cohesion of the group and helped everyone feel there was a proper place for them, both at the table and in the organization. For example, the seating arrangements at one post-training dinner I attended were themselves a message about the status of relationships between group members, in addition to physically determining what communication could take place between which people. Hiroshi understood this, as demonstrated by a hand-drawn sketch he made for me to explain the connection between physical space and professional relationships. The dinner was hosted in a traditional Japanese restaurant, and, as shown in Figure 1, guests were seated at one of two tables, with the more senior people, including the training team, being seated on one side of the room. Shoji doors had been removed to make the two spaces one.

These proxemic arrangements were not static, but rather required constant adjustment. Hiroshi explained that the seating at this event was formal but would continue to move toward more informality in the future as the training team members and audience members became familiar with one another. "We're going into another phase again . . . in terms of relationships, so probably next time, we'll be having Bill and ourselves sitting more in a central location, so people can gather around . . . so it's taking these steps." Thus, the closeness of relationships was reflected literally in the closeness of seating. As relationships became more intimate, hierarchical seating arrangements would relax and give way to more open conversation.

The tying of relationships to proxemics is also cited by Yamada (2002) in her study of Japanese business communication patterns, in which she discusses how office layouts reflect relational status (p. 56). Hiroshi, too, explained the importance of physical proximity, as

Floor layout of a restaurant where a post-training social event was held

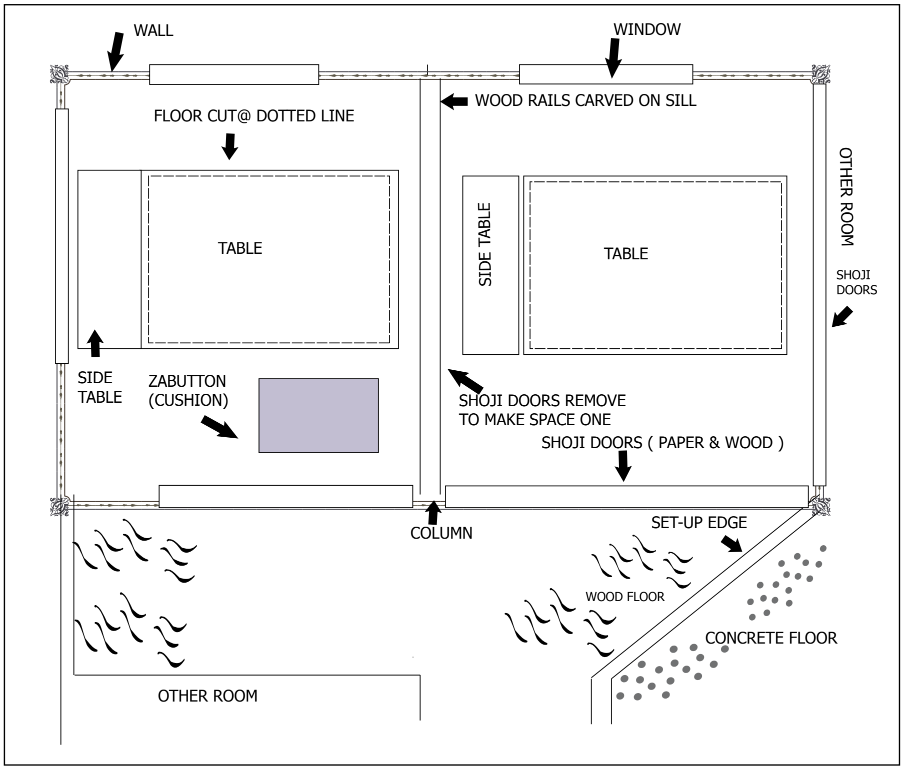

Figure 1: Training team members were proficient in the management of physical space, which reflected hierarchy and social intimacy, to facilitate group communication.

experienced by the training team in Japan, by referring to architecture. He noted that although some buildings in Japan such as the Sony building have a more western style, many building designs respond to the need for physical proximity as a show of status and power. He explained that traditionally, the highest status individual sits near the elevator door and "his people start fanning out, so people around the edges of the building are usually the lowest of the chain." He joked, "If you get to a window, that means, 'well, we don't have any work for you, so why don't you pass the time.'" Keiko added that this physical placement sends such a strong message that it causes most people to quit because they are ashamed. Bill pointed out that this arrangement is the exact opposite of the United States, where the senior positions are in the corner offices with windows. Yamada (2002) notes that in the United States, prestige is often linked to having independent control over one's own space, while in Japan, prestige is shown through one's physical closeness and connection to others, reflecting the value of interdependence. Likewise, the handling of space during pre- and post-training social events was an architectural enactment of Hofstede's (2004) power distance, a cultural measure that is much higher in Japan and other East Asian countries than it is in the United States.

Conclusions

The findings of this case study show that the team members approached communication in the organizational training context holistically, and team members acted accordingly within both formal and informal contexts. The team knew the very fact that they actively participated in a social event after the training session sent an unspoken message that they were personally committed to a relationship with the audience members. Formal and social spheres of the training were part of an integrated whole, and the team worked to operate successfully within this combined context.

In addition to facilitating formal training events—in which team members invented content, delivered training, and collected feedback (Melton, 2009)—the team members managed social and physical context (see Figure 2). In addition to recognizing the culturally defined spaces for communication that existed outside of the written and spoken text, the training team chose to communicate through these spaces. Much of this communication occurred through proxemics (Hall, 1966). The outsider, Bill, who was negotiating the nuances of proxemics, was able to draw on the expertise of the cultural insiders Hiroshi and Keiko.

Scope of Participants' Localization Practices

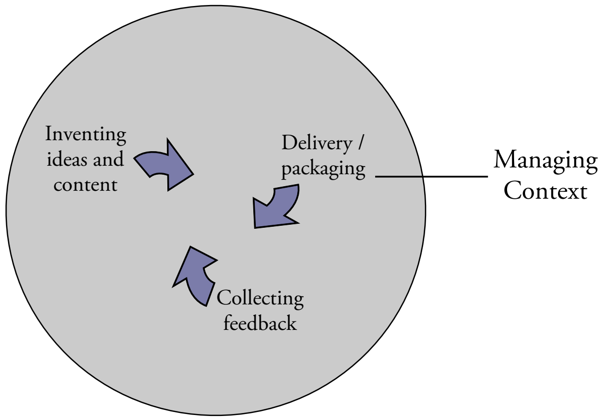

Figure 2: Key localization practices included managing the context surrounding the training seminar

Beyond telling us something about the localization practices and assumptions of organizational training in Japan, the case study also reminds us of what we do not know. Even as we begin to understand the culturally based rules of professional communication and apply them to the localization of organizational training, we must recognize that in different cultural contexts we may be playing different games entirely, based on different goals and assumptions (Yamada, 2002).

Limitations

This case study expands our understanding about the spaces of organizational training in Japan, but some limitations of the study must be recognized. For organizational and possibly for legal reasons, the organization did not give me permission to interview or survey audience members to get a more comprehensive picture of the training. I did observe the training and the audience members' response to it, a process that

was bolstered by data triangulation over a period of several months, along with poststudy member checks (Flick, 2002; Miles & Huberman, 1994; Yin, 1994). Yet, even with the robustness provided by these research procedures, there is always the possibility that the training was less effective than I (and the team members) thought it was. This limitation is real but peripheral, given that the primary purpose of the research was to explore the use of space in the localization of organizational training across cultures. The limitation is acceptable, in light of the lack of previous research on the topic and the difficulty of gaining access to organizations for such research. Data were gathered in all available ways in this study, adding to our knowledge about this important topic; future research can continue to test and build upon these findings.

Implications

Unlike the study participants, professional communicators in many organizational training contexts will not inhabit the same physical spaces as their audiences. They may interact primarily or even exclusively through e-mail, videoconferencing, or other virtual media. In these situations, professional communicators must find a way to fill the social and rhetorical void left by the absence of physical proximity and face-to-face communication in social settings, which, as this study has shown, serve an important function. Therefore, a vital practice in global professional communication contexts like the one observed in the study is finding new strategies to communicate when customary avenues, such as post-training social events, are closed (Auer-Rizzi and Berry, 2000). Keiko and Hiroshi engaged in such a practice, as described in a previous article, when they encouraged their long-distance Japanese associates to communicate concerns through e-mail rather than saving these concerns for face-to-face conversations (Melton, 2009). Yet, it is probably also true that nothing can ever fully replace face-to-face communication (Bloch & Whiteley, 2009, pp. 36–37). Thus, a final key element of localization practice for global professional communicators is recognizing the limited reach of certain communication media in specific cultural and social contexts.

This study's findings can be valuable on two levels. On the first level, they can inform professional communication practitioners and programs interested in the localization-related practices used in U.S.-Japan international training contexts. On a second and perhaps more important level, these conclusions are germane to professional communication theory about localization, particularly as it pertains to organizational training (Flick, 2002; Miles & Huberman, 1994; Yin, 1994). Six implications of this study, which can be read on both practical and theoretical levels for the development of localization practice, are described below.

First, the study shows that interaction within social spaces can be a vital counterpart to formal organizational training and a key site for professional communication. Recognizing such spaces, incorporating them into one's communication framework, and learning how to act interpersonally within them are all important abilities within global organizational training contexts. In a larger sense, these findings identify an important area of localization practice for professional communicators—recognizing and managing the social and physical contexts surrounding formal varieties of professional communication. This ability has gone largely unnoticed in the professional communication literature.

Second, the study suggests practical limitations in the absence of face-to-face interaction in global professional contexts such as Japan. If social spaces such as the bar or restaurant are unique sites where important professional communication occurs, exclusive reliance on distance-bridging technologies such as instant messaging or videoconferencing to conduct organizational training may fall short. Effective global professional communication depends not just on a mastery of technology but also on a recognition of its limits.

Third, the findings show the need for professional communicators to understand practices related to rhetorics of space or proxemics (Hall, 1966) in both professional and social settings. Particularly in high-context cultures such as Japan, how individuals interact in physical relation to each other can communicate more strongly than what is written or spoken. The interdisciplinary study of proxemics may open up new fields of study for professional communicators and others.

Fourth, the study confirms the acute need for professional communicators to be able to collaborate with cultural and linguistic insiders. Many of the adaptations described in the case study were so nuanced as to be nearly impossible for a cultural outsider to decipher on his or her own. Effective collaboration also requires the ability to recognize different cultural expectations about collaboration itself. In this study, the participants often viewed their collaboration in the Japanese mindset of interdependence rather than solely according to the American idea of a team working to accomplish an objective (Hampden-Turner & Trompenaars, 2000; Hofstede, 2004). They saw collaboration as polychronic (Hall, 1976), hierarchically interdependent (Hampden-Turner & Trompenaars, 2000, Hofstede, 2004), and face- or relationship-oriented (Cocroft & Ting-Toomey, 1994; Spencer-Oatey, 2000) rather than primarily monochronic (Hall, 1976), egalitarian (Hofstede, 2004), and goal-oriented (Hampden-Turner & Trompenaars, 2000). The ability to change one's mode of collaboration is important for global professional communicators when managing the use of space across cultures as well as when making other kinds of adaptation.

Fifth, the study suggests the need for the continued development of theory to address the use of space in professional communication across cultures. New theory is important because assumptions about practices such as localization frame the ways international professional communicators can recognize and work to develop needed competencies. This theory must be responsive to the cultural complexity of managing the physical and social spaces of organizational training.

Finally, developing the awareness of and ability to manage the use of space across cultures depends upon a continued reexamination of fundamental principles. As Weiss (1997) argues, revising the field's traditional conception of localization requires scholars, practitioners, and programs to see cultural realities that remain "hidden by our very definition of the professional communicator and the principles of professional communication" (p. 336). Such an effort will extend, redefine, reenvision, and remake the practices of professional communication, enabling professional communicators to choose from a range of strategies in response to the demands of cultural and organizational context.

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About the Author

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When Traditional Chinese Culture Meets a Technical Communication Program in a Chinese University: Report on Teaching Technical Communication in China

Daniel D. Ding

Abstract

Purpose: This article examines specific manifestations of the generalizations identified by literature in pedagogy in a Chinese university.

Method: Five open questions were asked of the university's five technical communication instructors in a 90-minute focus-group interview session to identify the important areas in pedagogy as conditioned by Chinese culture. The 300 students were surveyed to reveal their understanding of technical communication as it existed in China. Features as conditioned by Chinese culture and as manifested in the 300 students were also identified through my teaching and observing their performance in class.

Results: The five instructors taught the same lessons and the same course content determined by the university. They focused on teaching professional terms and phrases. They administered examinations throughout a semester to help students memorize the terms. The 300 students generally thought that technical communication was about science and technology. The general audience of technical communication, for them, was basically their country, and the purpose was to serve their country and society. In class, these students often studied through collaboration in groups; they memorized almost everything from their professor; and they preferred a broad thinking style to tackling broad issues.

Conclusions: Technical communication pedagogy is governed by Confucianism and the test-oriented Chinese society. In class, students were motivated by the collectivism Chinese culture stresses. Students' rote learning approach was influenced by their traditional way of learning, and the broad thinking style was a textual mechanism for students to complete assignments while upholding patriotism.

Keywords: technical communication, Confucianism, rote learning, collectivism, broad thinking style

Daniel D. Ding

Practitioner's Takeaway:

- American perceptions of technical communication are not universally applicable.
- Chinese authorities have the right to control the content of technical communication.
- Examinations are a useful tool that facilitates learning technical communication.
- Rote learning helps individuals learn specific content of technical communication.
- Collectivism and patriotism are important components of technical communication in China, so practitioners must design technical communication projects that promote and utilize collectivism and patriotism.
- A broad thinking style is an effective way to tackle problems in technical communication.

Introduction

In the fall of 2008, while on my sabbatical leave, I taught a semester of technical communication at China's Zhengzhou University. This was the second time I had taught technical communication at a Chinese university in the past nine years. In the summer of 2000, I taught two weeks of technical communication to a small group of students at Suzhou University. At that time, not a single Chinese university offered technical communication as an academic program; instead, most of its universities had developed a vocabulary-centered writing course—English for Specific Purpose (ESP)—which focused mainly on teaching professional terms. In addition, not too many faculty members who were teaching ESP understood technical communication as we would define it (Ding & Jablonski, 2001). Today, China has made much progress in advancing technical communication as a college discipline. At least two universities, including Zhengzhou University, have developed their own technical communication programs (Duan & Gu, 2005). Technical communication textbooks, though general and broad in context, are being published. More and more faculty members tend to accept it as an academic discipline.

My sabbatical experiences support the above-mentioned progress. Meanwhile, my teaching activities and my research activities at Zhengzhou University both suggest that a technical communication program in China has unique features—evidenced by the way our Chinese colleagues teach it and by the way Chinese students learn it—which are conditioned by Chinese culture. My experiences enabled me to see the challenges and opportunities for both our Chinese colleagues and international technical communication instructors who are willing to teach technical communication in China. These challenges were not manifest in 2000 when I was teaching in China for the first time. More important, my leave provided me an opportunity to explore how Chinese culture manifests itself within particular practices of and approaches to technical communication programs.

Researchers and practitioners in the past 10 years or so have focused many of their studies on how Chinese culture bears directly or indirectly on technical communication in China, suggesting that technical communication in China is an important component of international technical communication. Ulijin and St.Amant (2000), for example, report that based on an experiment, individuals from China interpret the same negotiation process differently than individuals from other cultures, due to their cultural assumptions and beliefs. St.Amant (2001), in his invitation to technical writers from industrialized nations to work closely with their Chinese counterparts to create culturally effective documents for Chinese users, suggests that human relationships impact communication practices in Chinese culture. Wiles (2003) claims that Chinese culture is conducive to developing the skills for single-sourcing, skills that are essential to

technical communication. Ding (2003) argues that *Yi Jing*, completed in 500 B.C., is the earliest technical communication work in China that championed a philosophy that underlies Chinese technical communication practices—unity between contexts and objects (such as a document) to be used in the contexts. Barnum and Li (2006) have contrasted Chinese and American cultural values that govern the ways technical communication is practiced in the two different cultures, pointing out that Chinese culture orients page design in China. Ding (2006), after studying Confucianism and technical communication in China, points out that Confucianism is the driving force of the indirect style of Chinese technical communication. Its three core principles—*ren* (human heartedness), *yi* (righteousness), and *li* (proper conduct code)—shape the way a document is developed and created in Chinese culture. Yu (2009) has studied Chinese culinary instructions in the context of Chinese culture, suggesting that culinary instructions in China have a history of 2,000 years. Ding (2010), after studying the first comprehensive technical communication book in China, *On Technological Subjects*, argues that influenced by Confucianism, using names (nouns) for the titles of instructions is a striking feature of Chinese instructional manuals, thus making clear one difference in style between Chinese and American instructions.

The above studies have revealed the following generalizations about technical communication in China: First, its practices are highly influenced by Confucianism. Second, they are highly contextualized so that audiences are expected to have much pertinent knowledge when using a technical communication document. Third, technical communication employs an indirect style in business correspondence and business negotiations because it often combines personal information and stories with business information to help establish harmonious relationships between authors and audience. Fourth, it has a long history, as it has been practiced for more than 2,000 years.

Many other researchers and practitioners have addressed technical communication education in China, an issue that is more relevant to this article. Ding and Jablonski (2001), for example, point out that Chinese universities, given their cultural and social contexts, emphasize vocabulary-building skills in their version of a technical communication course, ESP, arguing that such a course is built on the assumption that technical communication is done by scientists for other scientists. Barnum, Philip, Reynolds, Shauf, and Thompson (2001) tell us that "the Chinese classroom is very different from the Western classroom" (p. 400) and that rote learning helps Chinese students learn the language and build a good relationship between teachers and students. Duan and Gu (2005), two Chinese instructors of technical communication, share their experiences of teaching a Chinese version of technical communication—English for Technical Communication—in China, especially their use of, in their own terms, "a more Western style of teaching" (p. 445), testing skills, and use of labs. Dautermann (2005) discusses the difficulties she experienced in training a group of Chinese business writers in a two-week session "in an authoritarian culture" (p. 156), where she encountered issues of resources, equipment, teaching environment, and politics. Barnum and Li (2006), while discussing challenges to technical communication education in China in their contrast study of American and Chinese cultural values, stress that a major "impediment to the adoption of technical writing courses at the university level is the current focus in English classes on language acquisition and precision in vocabulary and grammar, which leaves little room for teaching principles of technical communication" (p. 149). Golemon (2008) planned a technical communication course for a Taiwan university, arguing that such a plan must be based on three features of Chinese culture: power distance, uncertainty avoidance, and collectivism. Roberts and Tuleja (2008) report six cultural challenges they encountered while teaching a course of managerial communication in Hong Kong: Chinese students' unwillingness to speak out in class, their difficulties with English, their unwillingness to ask questions in class, plagiarism, their indirect style of reasoning, and the Chinese approach to teaching (i.e., one-way lecture from the instructor); thus they claim that they "experienced considerable difficulty in shifting from a student-centered approach to a teacher-centered one" (p. 485). Ding (2010), after introducing another version of Chinese technical communication course—English Relative to Individual Disciplines (ERID), claims technical communication courses (as we define them) in China should be based on China's historical and cultural contexts, proposing that ERID can serve

as starting point to launch such courses. He also stresses that ERID "focuses on language acquisition, disciplinary vocabulary, and genre knowledge, and translation skills" (p. 314). In short, it is basically a language skill course.

The studies cited above identify three general points: First, technical communication education in China with its unique features is not technical communication education as we would define it. Second, most Chinese universities, if they offer technical communication courses at all, offer the so-called ESP course, which is oriented toward building professional terms. Third, we should not simply graft our version of technical communication programs onto China's universities.

Now the question is, given our understanding of the relationship of Chinese culture and technical communication in China, what are some of the specific features of Chinese culture made manifest in a particular technical communication program at a Chinese university, and by extension, in technical communication education in China? For example, what do Chinese instructors teach in a technical communication class, and why do they teach the way they do? What pedagogical strategies do they employ? How do students learn technical communication? This article attempts to answer these questions. Some of the studies mentioned above may have touched upon these questions, but in a very general fashion. For example, Duan and Gu (2005) report their experiences of designing a technical communication course based on an ESP course, adapting a Western style of teaching to their students. Golemon (2008) discusses how to plan for developing a technical communication course in Chinese culture, arguing that Chinese culture should guide such a plan. Other studies are only suggestive of an answer to some of these questions. For example, Roberts and Tuleja (2008), while discussing the six challenges they experienced in teaching, imply that instructors are the source of knowledge in class and that students memorize course materials as a way of learning. This article addresses these questions more articulately.

First, I report my informal research of interviewing five technical communication instructors, focusing on how they teach technical communication. Second, I discuss my research of surveying 300 technical communication students, attempting to explore their perceptions of technical communication as it exists in Chinese universities. Then, I discuss my teaching activities, focusing on the students' performance vs. the class size, their study habits, and the strategy they use in completing technical writing assignments.

Interviewing Technical Communication Instructors

Before I started teaching, I conducted informal interviews to help myself understand how the Chinese technical communication instructors approached technical communication pedagogy so that I could adapt my teaching practices to the Chinese students.

Interview Method

I used focus group interviews. Focus group interviewing is usually limited to a small group of about six "to permit genuine discussion among all its members" (Stewart & Shamdasani, 1990, p. 10). Lewis (2000) suggests that focus group interviewing is less directive and more interactive because it allows all the interviewees to participate in interviews that resemble a group discussion. Glesne and Peshkin (1992) believe that some people, especially shy people, feel more comfortable expressing themselves when others, especially their fiends, are also present. In other words, discussions may be more productive in a small group of people who know each other well. Given a small group of interviewees and the cultural assumption that individuals in Chinese culture are inclined not to speak out, especially when a foreign professor is present, I believed this interview method would work well for my purpose.

The department had five technical writing instructors, and I interviewed all of them. Of those five, four had been teaching the course for two years, and one for one semester. All of them were teaching at both graduate and undergraduate levels, and one of them was directing a student's master's thesis at the time. All five instructors had master's degrees; one was an associate professor and four were lecturers.

I generated five interview questions based on the following principles: First, the questions should help me understand the important areas of technical communication courses these Chinese instructors were teaching. I believe the important areas include selecting course content, identifying and tackling

pedagogical issues, developing students' qualifications for employment, and connecting culture and technical communication. Second, the questions should help me learn the instructors' perceptions of the areas of technical communication that the Chinese university wanted me to help with by giving a series of lectures to its faculty: culture and technical communication, workplace needs and technical communication education, and technical communication textbooks. Third, Krueger (1988) recommends that focus group interviewing use about five questions. Thus, I formulated the following five questions:

1. How many years have you taught technical communication?
2. What do you teach in a technical communication class?
3. What are some of the important current issues in technical communication pedagogy?
4. What does the workplace require your graduates to know before they are hired?
5. What role does Chinese culture play in technical writing and technical communication pedagogy in the university?

To collect data, I used a tape recorder assisted by note taking, especially when background noises were too loud. The entire group interviews took 90 minutes.

Results

Two older instructors were more talkative than the three younger ones, who, though they themselves were instructors, were somewhat bashful. Only after an older instructor started talking did they begin to answer questions, but still their answers were often truncated and sometimes not very articulate. Here I report their answers to all the questions except the first one, which was about the interviewees' background.

Question 2: What do you teach in a technical writing class? All of them explained that they taught sentence-making skills, professional terms, and professional writing translation skills. One important reason why they taught the same lessons, according to one instructor, is that they all used the same textbook, *Business English: An English Course in Business Writing* (Xian, 2002). Both the textbook and the course content were determined by the school, which followed the guidelines of the Chinese central government. In other words, what to teach and how to teach it were not completely up to the instructors to decide. What these instructors told me corroborates Dautermann (2005), who brought up the point of "highly regulated teaching environments" when she was listing the "institutional barriers that are likely to limit the use . . . interactive teaching methods" in a Chinese university (p. 156). The textbooks, course content, and the lessons are regulated by the central government, and the instructors are expected to pass them on to their students.

They believed that instructors were more important than textbooks, because knowledge came from the instructors. They could impart their writing skills and knowledge to their students. They took students through a text word by word, explaining points of vocabulary and content along the way. Then they made sure that students learn the meanings of these words. One important approach they used was to have students use new words or phrases from the previous lessons in making up new sentences or in composing a text. Students who did well, they admitted, were those who had memorized entire chapters and the definitions of the words and phrases they had learned. Thus, although their textbook contained lessons on using forms and rhetorical strategies such as buffers in bad news reports, these five instructors chose to focus on using language. They stressed that students could learn those strategies by themselves in the workplace, but they could not learn to use correct words and phrases in the workplace.

Question 3: What are some of the important current issues in pedagogy? The five instructors brought up two issues in their teaching practices. First, it was impossible to cover all the lessons in examinations in a technical communication class (e.g., features of business report and contracts). Second, because examinations could not cover all the course materials, these instructors were anxious that students would not learn everything they taught. One instructor particularly added that in her class, she sometimes used multiple-choice questions in examinations on features of business reports and contracts and other nonlanguage skills. These examinations, though she realized that they did

not work well all the time because she knew memorizing these features did not mean that students could use them properly in written documents, proved very practical, at least when she wanted her students to get familiar with these features.

One instructor talked about using samples in pedagogy. He told me that the samples used in a technical writing class should be model documents that all students could emulate and use, but it was not easy to find such samples in China. This lack of model samples made it very difficult for students to learn to write technical documents correctly.

Questions 4: What does the workplace require your graduates to know before they are hired? The five instructors shared the view that Chinese job market demanded more technical translators than technical writers, so many companies in China wanted their students to be well versed in both English and Chinese. The workplace wanted their graduates to write well, but more than 50% of them could not write without making many errors in their documents. These instructors informed me that some graduates could not even write a paragraph in the workplace without making more than 10 major mistakes. So the university stressed the importance of writing well. Writing well, for my Chinese colleagues, often means using words and phrases already memorized. These instructors felt that they had a responsibility to ensure that their students know how to write. They firmly believed that they could pass writing skills on to their students.

One strategy they used was quizzes and examinations. They anxiously told me that exams were an effective means to ensuring that their students had mastered what they had taught. All five instructors told me that they administered a quiz every week, one midterm examination, and one final examination. The major purpose of these tests was to ensure that students memorize the definition of terms and expressions so that that they might use them in making new sentences or composing new texts. Often in the tests, they asked students to fill in a blank or to make up a sentence by using a word, a phrase, or a sentence from their textbook.

Question 5: What role does Chinese culture play in technical communication and technical communication pedagogy in the university? One instructor remarked that traditionally, China had a lot of technical writing examples. He cited two examples of scientific and technological books from ancient China: *Yellow Emperor's Internal Channels*, a book on traditional medicine from the Warring States period; and *On Technologies*, a comprehensive book on technology from the Ming Dynasty. In this instructor's words, "China has a long history of technical writing, and today's task is to further develop this tradition to let it serve China's modernization drive." All five instructors claimed that they had a responsibility to carry on the fine tradition of Chinese culture by transmitting it to their students.

Discussion

These professors' remarks in the group interviews suggest that technical writing pedagogy in this Chinese university, particularly in terms of delivering course materials and lessons, is influenced by traditional Chinese culture. First, for thousands of years, texts of study (i.e., Confucian texts sanctioned by the dynastic governments) were not to be altered or modified; interpretations were provided by the governments too; these texts were just to be used (Upton, 1989). Mencius, who transmitted and developed the teachings of Confucius and who was second only to Confucius himself in creating the historical importance of Confucianism, once remarked that he had transmitted the Confucius's wisdom simply by teaching his words without adding any comments or interpretations (Waley, 1977). The modern Chinese educational system seems to have carried on this tradition, because the Chinese Ministry of Education must approve texts to be used; professors are not allowed to choose their own.

Second, in Chinese culture, the teacher is the knowledge authority "whose message never deviates from the textbook and who imparts the text's correct information to the students" (Beamer, 1994, p. 16). Confucianism firmly believes that knowledge can be transmitted from master to pupils; learning, for Confucius, is learning from masters (Lau, 1997). To evaluate their mastery of the ancients, students often took exams which "were to a large extent a test of students' ability to memorize and internalize tremendous

amounts of materials" (Upton, 1989, p. 21). In fact, this emphasis on memorization in Chinese education dates back to ancient China, when students were taught to repeat Confucius's teachings in order to memorize them (Beamer, 1994). Similarly, in modern China, the teacher plays the same role of imparting knowledge and the student plays the same of role of mastering it (Beamer, 1994). Even the tradition of Chinese culture has to be transmitted by teachers to students so that it can "serve China's modernization drive." In other words, a teacher's responsibility is still to disseminate the correct messages from texts to students and then to ensure that they learn them through memorization, while students' role is still to "master what has been imparted" (Beamer, 1994, p. 16). To assess students' learning outcome, teachers administer tests in which students are expected to repeat verbatim what they have learned from their teachers. No wonder the five technical communication instructors firmly believed that they could impart the correct information from the textbook to their students and that exams could effectively make students learn.

Surveying Technical Communication Students

I also surveyed my Chinese students, 200 graduate students and 100 undergraduate (sophomore) students. One might argue that because the undergraduate students had not taken any technical communication classes before and thus they were not very knowledgeable about the field of technical communication, their opinions are probably not very significant. Thus, I discuss only the data obtained from the 200 graduate students.

Survey Design

Through the surveys, I wanted to learn the students' attitudes toward technical communication. In addition and more important, I needed to find out the students' perceptions of the main concepts I would focus on in class. To get to know the students' attitudes, I formulated five questions based the concepts most of the technical communication textbooks we use in the States (Anderson, 2010; Burnet, 2005; Lay, Wahlstrom, Selfe, Selzer, & Rude, 2000; Markel, 2001) cover in the first chapter or part: definition of technical communication, role of technical communication in industry, technical communication and your career, audience and purpose, and ethics. Thus, I generated the following five open questions:

1. How do you define "technical communication"?
2. What role does technical communication play in decision-making?
3. How do you see the relationship between technical communication and your career?
4. How do you define audience and purpose?
5. What is "ethics" in technical communication?

To learn the students' perceptions of the concepts I would teach in class, I chose the following nine topics to be rank-ordered by the students on the survey from most important to least important, with 1 as the most important and 9 the least important:

1. Paragraph structure
2. Sentence structure
3. Audience analysis
4. Writing purpose
5. Correct spelling
6. Correct diction
7. Vocabulary
8. Ethics in writing
9. Document design

I picked the above nine topics for two major reasons: First, these were the topics that the university and I had agreed that I would cover in my sabbatical teaching. Second, they were the same concepts I had used on the surveys the first time when I taught technical communication in China, which would allow me to compare and contrasts the results, though this article does not address the comparisons or contrasts.

The 200 graduate students represented 45 programs in 19 academic colleges and departments, such as English, chemistry, physics, materials, civil engineering, surveying engineering, business, medical science, Chinese medicine, pharmacy, nursing, electronics, law, hydraulics, geology, environment, biology, mechanical engineering, and botany. All of them were working or had working experiences, and all of them had taken at least one technical communication class before. I distributed the surveys among all 200 graduate students on the first day of class.

Survey Results

The students, when they were answering the survey questions, thought they were taking a test, especially when they were working on the five open questions. Many indicated that they had not prepared for the test, so they were concerned that they would not be able to pass. Given the Chinese education system, most of these students had never taken a survey before, and many of them looked for standard answers. Some of them even openly asked me if I would grade their answers. I explained that it was not a test and that they should not identify themselves. Upon hearing that, they wanted to know if they "have to" turn them in. I emphasized that it was on a voluntary basis, because it would not affect their course grade; however, I stressed, the more responses I received, the more I would learn about the students, which would help me plan the course. Finally, I received 127 responses.

Not all the 127 students who returned the questionnaire answered all the five open questions, probably because they were open questions and thus took longer to complete, or because they were more challenging than simply rank-ordering the nine topics. Only 121 students defined "technical communication," 78 discussed the role technical communication played in decision-making, 137 answered Question 3, 140 defined "audience and purpose," and 98 defined "ethics" in technical communication. Table 1 summarizes the distribution of answers to the five questions. If an answer was given by fewer than five students, I included it in the category of "other answers.

Table 2 illustrates the results of rank-ordering of the nine topics by the 127 graduate students. The numbers with which students rank-ordered these topics are added and averaged. The more points a topic received, the less important it is. The average for each topic was obtained by dividing the sum of the numbers with which students ranked the topic by the total number of responses (127). The averages were then ranked to indicate which topics were viewed as most important to least important. I include the averages in the table because they are relatively small numbers and as such, readers can more easily see the ranges within the data set by focusing on them than on the raw points. The nine topics appear in the table in the same order as they appeared on the survey.

Discussion

Students' answers to the five open questions indicate that although these students had taken at least one

Table 1: Distribution of answers to each of the five open questions

Questions	Answers
Question 1: Definition of technical communication	34: "Very Technical," 21: "About Science and Technology," 19: "About Anything," 19: "I Don't Know," 16: "Written by Technicians," 12: "Other Answers"
Question 2: Role in decision-making	24: "An Important Role," 19: "Not Sure," 21: "Not Important," 13: "Somewhat Important," 11: "Other Answers"
Question 3: Technical communication and career	53: "Helps My Career," 36: "Somewhat," 13: "Not Sure," 35: "Others Answers"
Question 4: Definition of audience andpurpose	44: "The Country and the Society and to Serve Them," 30: "The Teacher and to Graduate," 21: "Recruiters and to Find a Job," 17: "Boss and to Get Promoted," 28: "Other Answers"
Question 5: Ethics and technical communication	41: "Socialist Ethics," 36: "Good Morality," 9: "I Don't Know," 12: "Other Answers"

technical communication class before, they defined technical communication in a narrow sense. For them, it was about science and technology, and the writing itself just used many technical terms. One student stated that she had learned many such terms in a technical English class she had taken the previous semester so that now she could confidently write about technology through employing these terms. Another student noted that technical writing was "done by scientists and technicians for other scientists and technicians, and unless you are a scientist, you cannot understand it." Although 53 students thought that technical communication plays "an important role," none elaborated on this role; only 6 students commented on its role by claiming that technical communication could help the government develop a better and a harmonious society for the people. It is apparent from my survey that students had rarely thought about technical writing as having relevance to the workplace in a more general sense.

However, as Table 1 shows, 53 students believed that technical communication helped their own careers. For them, technical writing was addressed to their teachers, job recruiters, or bosses in order to graduate, find employment, or be promoted. It seems that they thought technical communication served their personal interests, but if we examine this question in conjunction with their answers to Question 4, we realize that the ultimate audiences are their country and society. That is, in the short term, technical communication served their personal interests because it could help them graduate and find a job, but in the long term, it helped them serve their country once they found a job. So of the 140 students who defined "audience and purpose," 44 answered explicitly that the audience was their country, and the purpose was to serve their country; 41 believed it could help them graduate and find a job. Only 17 thought it would help them get promoted, thus serving their personal interests.

The fact that 44 students defined "audience" as their country and society and the purpose to serve their country and society strongly suggests that, for these students, technical communication becomes an

Table 2: Nine topics rank-ordered by graduate students (N = 127)

Topic (Total Points)	Average	Rank	Listed as Number 1 in Importance	Listed as Number 9 in Importance
Paragraph structure (657) (sstruxtureStructure	5.17	7	------	-----
Sentence structure (582)	4.59	5	7	-----
Audience analysis (441)	3.47	3	16	11
Writing purpose (276)	2.17	1	61	9
Correct spelling (701)	5.52	8	7	-----
Correct diction (630)	4.96	6	8	-----
Vocabulary (413)	3.25	2	16	-----
Ethics in writing (569)	4.50	4	8	16
Document design (991)	7.80	9	-----	78

ideological tool to show their patriotism. "Ethics," for 41 students, is "socialist ethics," and for 36 other students, it is "good morality." When I asked them to explain to me what "socialist ethics" and "good morality" consisted of, some pointed out that "socialist ethics" was rich in content and referred to the spirit of helping others and sacrificing oneself for the interests of the country and others, and "good morality" entailed the same values as "socialist ethics."

The results of rank-ordering the nine topics are consistent with the results of answering the five open questions. As Table 2 indicates, writing purpose came in first and vocabulary came in second, followed by audience analysis. The results suggest that students focused on the importance of purpose, but to them "purpose" often meant, as Table 1 indicates, serving the country or getting a good grade so that they could learn more to serve the country. Vocabulary came in second because without knowing a lot of words, students stated in their responses, they would not be able to read and write. Audience analysis closely followed vocabulary. Actually both vocabulary and audience analysis were listed 16 times as number 1 in importance. Students explained to me that audience ranked third because it was very important to ensure that what they wrote was what their motherland needed to know. In this way, their writing could better serve the country. In other words, their motherland was their ultimate audience.

In a nutshell, the survey results suggest that first, for my students, audience and purpose could be separated from each other, and second, audience and purpose were often clear without being analyzed and identified. That is, most often the purpose of writing is to serve the country, and the audience is their motherland. In China, audience and purpose are rarely discussed in college writing classes. As Duan and Gu (2005) point out, "Chinese English instructors refuse to recognize that . . . audience analysis… [is] related to the teaching of English" (p. 439). Instead, Chinese universities and schools encourage students to study for their motherland, and teachers specifically tell students that everything they are doing in a class is to serve their country after graduation. As a result, most of the students think the only purpose of writing a paper in a class is to prepare themselves for the job of serving their country after they graduate. The emphasis in defining audience and purpose as serving the country has a lot to do with traditional Chinese culture, which gives priority to the collective. Research has established that Chinese culture stresses the collective and deemphasizes the self (Ding, 2006; Huang, Andrulis, & Chen, 1994; Winfield, Mizuno, & Beaudoin, 2000;). When defining audience and purpose in terms of the collective, these students seemed to try to conform to this tradition of Chinese culture.

It is also noteworthy that vocabulary ranked second. Clearly, it was very important to the students. This can be explained by the fact that in Chinese universities, teaching writing has always stressed the importance of memorizing words and phrases and then using them in formulating new sentences and paragraphs. Indeed, as my interviews with the technical writing instructors revealed, vocabulary building was a major part of their course content; students had learned to view vocabulary building as an essential skill in a technical writing class. This stress on vocabulary is clearly conditioned by the traditional communication pedagogy in Chinese universities, a pedagogy championed by Confucianism, which emphasizes memorization (Beamer, 1994). My survey results regarding vocabulary are consistent with Roberts and Tuleja's (2008) observation that in China "[m]odern teaching still adheres to this practice (of memorization)" (p. 481).

Table 2 also indicates that not a single student listed document design as number 1 in importance. On the contrary, 78 students listed it as ninth in importance. Also, the range within the averages does not seem to be large, except, perhaps, for document design. For example, the average for writing purpose, ranking first in importance, differs by 3.35 from that for correct spelling, ranking eighth in importance; however, it differs by 5.63 from that for document design, ranking ninth in importance. This large range suggests that document design is still a new territory for Chinese students. My discussions with the technical writing instructors reveal that none of them has even brought up that topic in any of the technical writing classes. No wonder document design came in last in the survey results. Ethics came in fourth, though it is rarely taught in a technical writing class in Chinese universities. But Chinese students have a different perception of ethics; for them, the term usually means "conforming to socialist ethical viewpoints."

In summary, the surveys, though small in scope, represent a sample of Chinese instructors' and students' views of technical writing in Chinese universities. First, students define audience and purpose in terms of the collective: their motherland. Even when they were discussing ethics, they seemed to think of ethics in terms of the collective: the ethics of society—socialist society. Second, technical communication pedagogy—teaching vocabulary and emphasis on memorization—is conditioned by traditional Chinese pedagogy, which focuses on rote memorization. Finally, technical communication is mainly done by professionals for professionals, so teaching technical communication is teaching professional terms. In short, technical communication in Chinese universities is heavily influenced by Chinese culture.

My Teaching

The interview and survey results helped me design graduate and undergraduate courses. To my undergraduate students, I introduced the basic forms of technical communication, such as memoranda, instructions, descriptions, short reports, and proposals. In my graduate classes, students learned to manage an extended written project throughout the semester—an operational manual, a procedure manual, an employee handbook, a training handbook, or a technical report. In addition, students wrote a number of short supporting documents such as memoranda, proposals, progress reports, and treatments.

In this part of my sabbatical activities, I was both a participant and an observer. I was a participant because I was the visiting professor teaching 300 students, directly interacting with them in class and during conferences on their papers. I was an observer because I often observed their behaviors, as when they were reading textbooks, course materials, or handouts in order to memorize them. This part of discussion is based on the data I obtained as a participant/observer.

Method

I wanted to identify the features as conditioned by Chinese culture and as manifested in the students, especially in the way they performed academically in a technical communication class. But first I needed to decide where to look for these features. My graduate class syllabus divided a student's course grade into four components: two 2-page papers, one 6-page paper, one 15-page paper, and class participation. For my undergraduate students, the syllabus had similar components of course grade—written work and class participation, though the written work consisted of five short papers. I was able to determine the following two principles that governed my research as a participant and an observer:

Strategies students used for completing papers

Students' performance in class

My participatory/observational study took place during the entire 16-week semester at Zhengzhou University. There were 300 students in six classes. I taught each of the six classes for 2 hours a week: two classes on Monday, two on Wednesday, and two on Thursday. I read a total of 1,560 drafts of papers by both graduate and undergraduate students. In addition, I conducted a 3-hour conference with my students every day of the week. My participatory/observation research revealed the following three features:

Large class size is conducive to developing students' sense of collectivism.

Memory-based study habits help students learn course materials and succeed in examinations.

A broad thinking style in their papers suggests students' sense of patriotism.

Discussion

Students' sense of "collectivism" in large classes. In teaching 300 students in six classes, I met with two major challenges: conducting weekly one-on-one conferences with students, and grading papers. Clearly, it was impossible for me to conduct conferences with all of my 300 students every week or to read and grade 300 papers a week. However, it provided an excellent opportunity for me to observe more students than I had expected. But still I expressed my concerns to the dean, who told me immediately that I might choose to read and grade a sample of 10 papers from each class for every assignment. I also suggested that we break the large classes into smaller ones, but the dean explained that such large classes were arranged on purpose, because they were conducive to developing students' sense of collectivism, which was always emphasized in Chinese education.

Research suggests that Chinese culture highly emphasizes collectivism while deemphasizing individualism (Chen, 1997; Ding, 2006; Hofstede, 1991). In the collective culture, people place a high value on harmony within a group in order to maintain order in society (Ding, 2006). So “individuals tend to act primarily in accordance with the anticipated expectations of others rather than with internal wishes” (Zhong, 2008, p. 112). In class, Chinese students are encouraged “to seek guidance from others’ opinions such as their colleagues” (Zhong, 2008, p. 118). Perhaps a large class provides more and better opportunities than a small one for students to learn to act according to others’ expectations. Through the learning process, students maintained harmony within the group (the class), thus fostering a sense of collectivism.

Indeed, in my classes many students, especially graduate students, asked their friends to help them if they did not know the answer to questions I raised in class. Even when I asked them to do in-class written exercises independently, they still sought help from others. Often, they automatically formed into small groups of 5 to 10 and started discussing the exercises, though they were not group work. The monitor (a Party member chosen by the university to coordinate students’ activities) walked from group to group to pass ideas from one group to another. When I told them to complete the exercises independently, the monitor explained to me that they were helping each other out by sharing ideas on these exercises; he then invoked a Chinese idiom, “Three stupid cobblers can match one Zhu Geliang” (a very talented primary minister in the Three-Kingdom period), meaning they could not complete the in-class exercises without the concerted efforts of the collective groups. Here, the monitor, to justify the students’ choice of group work, was invoking the strengths of collectivism which Chinese culture stresses. The monitor added that their professors often encouraged them to seek help from others if they met with hurdles in their homework. One of the advantages of a large class, the monitor emphasized, was that you could obtain more ideas from others than in a small class.

Their sense of collectivism was also manifest when they had conferences with me. Neither the graduate nor undergraduate students ever showed up for the conferences without forming a group of around 10. They then sat down in a circle around me, expecting me to discuss their papers one by one. I told them that conferences were more effective if they were conducted on a one-on-one basis than on a group basis, unless the group shared the same strengths and weaknesses in their papers. The students replied that with a group they could write a much better paper because they had shared their ideas already while drafting their papers, so that if they had conferences with me in a group, they could learn more strategies from me and memorize more information than one person. It seems that these students here made the same invocation as the monitor in class: collectivism. They picked their group members according to their programs, paper topics, and shared academic and personal interests. One student explained to me that the more students there were in a class, the more choices, thus better groups. In a sense, the large class size also helped students form into groups for conferences.

Because “collectivism” was upheld in class, I believed that Bacon’s (1996) “response group” and Dale’s (1997) “co-authored writing assignments” would help me tackle the problem of oversized classes. First, Bacon’s model helped me reduce conference time. In Bacon’s model, the class forms into small groups and the writers read their papers to the group by turns. When the reading is over, the writer listens to the group members discussing his or her paper. Then the writer may respond with his or her own comments. In addition to the advantages elaborated by Blackburn-Brockman (2003), this model gave me another advantage: It worked very well in a culture that emphasized collectivism. Students, including undergraduate students, actively responded to each others’ papers and helped each other make revisions, so that when they came to the conferences, they had a better draft. That meant shorter conferences to accommodate more students.

Dale’s cooperative method helped me solve the problem of reading too many papers. My students, graduate students in particular, were from various schools and departments, and many of them were term-working on projects assigned by their schools and departments. I broke the class into small groups of 7 to 10 according to the projects they were undertaking. This method worked beautifully because it offered an opportunity for them to collaborate with their team members in drafting reports, thus allowing them

to demonstrate their “collectivism.” Certainly, as Blackburn-Brockman (2003) has pointed out, assigning coauthored papers for the sake of saving time only is not appropriate; for me, however, the coauthored assignments did have an added advantage: Instead of reading 300 papers a week, I read only about 80 papers.

Memory-based study habits. My observation of the students’ performance in class indicates that indeed they used rote learning as a major means to study. As identified in the literature from the field of education in general, a large number of Chinese students adopt memorization as a major approach to learning (Cavanagh, 2007; Marton, Wen, & Wong, 2005; Roberts & Tuleja, 2008; Watkins, 2000; Watkins & Biggs, 2001; Zhao, 2007). One reason why Chinese students prefer rote learning might be explained by how Chinese professors teach. Chinese universities always stress the importance of test-oriented education (Cavanagh, 2007). As I have already pointed out, this educational approach started in ancient China as a means to learning Confucius’s teachings (Beamer, 1994). Despite the recent reforms in education to emphasize quality, the Chinese educational system is still largely test-oriented (Zhao, 2007).

In addition to culture, memorization-based study is also influenced by Chinese social conditions. China has a large population, and opportunities for students to go to college, to find jobs, or to study abroad are very limited. In this respect, China’s test-oriented education is simply practical and realistic because it provides schools and universities with a “way of selecting students from a vast pool of qualified applicants” (Cavanagh, 2007). High-school students study to take college entrance examinations; college students study to take graduate-school entrance examinations; they also study to take examinations that could allow them to study abroad; they even take examinations to get a job or to get promoted. Spaces are limited, so students must compete to get in. Thus, test results are highly valued in Chinese education. As Zhao (2007) points out, “test preparation overrides national curriculum requirements” (p. 73). For Chinese students, tests offer a way out of their current existence to a higher and better position. In other words, “they see learning as a means to some other end” (Kong & Hau, 1996, p. 75). To succeed in these tests, students just focus on the “most essential aspects rather than on the meaning [and] the strategy adopted will be mainly rote learning” (Ibid.).

My experiences at Zhengzhou University not only support the above-cited studies, but more important, they revealed that students not only employed rote learning as study habits, but they also adopted another strategy to help themselves memorize course materials—collective rote learning.

Before the semester started, I had not expected to see my Chinese students so persistent in memorizing the texts, for I thought that I was not going to teach them to make sentences or build vocabulary; I was teaching rhetorical strategies in technical communication. But I was wrong. Every morning before classes began, students went to their classrooms to read the texts aloud again and again in order to memorize them. They even tried to memorize different ways of analyzing audience and purpose, forms of documents, and shapes of different charts and graphs. During their nightly self-study time, they went to their classrooms to study the handouts I had distributed in class earlier that day in order to commit to memory the key words and phrases. When I was introducing Modern Language Association (MLA) and American Psychological Association (APA) styles of documentation, students even tried to learn the specific rules of MLA and APA.

They also attempted to memorize samples I distributed in class. The first assignment in my graduate classes asked students to write a prospectus for the research paper. After discussing the assignment, I passed out a couple of examples, asking my students to critique them in small groups so that they could learn from both the strengths and weaknesses in the examples. Much to my surprise, when the group activities were over, many students had already memorized two or three paragraphs. I explained to them that it was not necessary to commit the examples to memory, but they provided three reasons why they thought they had to: First, they were concerned that in the midterm or the final exam I would ask them to use the phrases and words from the examples. Second, they memorized the phrases and words so that they could use them in their own prospectus. Third, they might use the words and phrases in their other class assignments. Indeed, in their own papers they used phrases, sentences, and even paragraphs from the examples and other sources without properly documenting these sources. This verbatim copying of

information from examples and other sources smacks of Confucianism, which stresses memorization as a way of learning. Confucius once talked about learning by heart the *300 Classic Poems* because memorizing these poems would enable one to express oneself by using the lines form the poems (Lau, 1997). More important, it corroborates Roberts and Tuleja (2008), who observed that their Chinese students also used similar strategies of copying information from sources without citing them. Perhaps rote learning indeed helps Chinese students learn to use English faster and more effectively.

My students also tried to memorize materials and information collectively. That is, they formed into small groups of five to seven, and each group member was assigned to memorize one item. For example, in learning APA and MLA styles of documentation, the students in Class 3 formed into six groups. Some group members were asked to memorize the entry for a book by a single author; others were to learn the entry for a journal article by three or more authors. In memorizing a sample, some students were to learn the first two paragraphs; others the second three paragraphs. So next time they were working together, members would contribute their memorized information to the group. In this collective rote learning practice, students demonstrated the importance not only of memory-based study habits but also collectivism in class.

Broad thinking style vs. specific thinking style Considerable research has focused on different thinking patterns as a way of studying cultural assumptions and features in technical communication. Roberts and Tuleja (2008), discussing their experiences of teaching a managerial course in a Hong Kong university, identify as a challenge to their pedagogy Chinese students' preference for the inductive approach and their resistance to the deductive line of reasoning. Barnum and Li (2006), after comparing Chinese and American communication documents, point out that Chinese students prefer inductive thinking while American students always think deductively in their communication practices.

My sabbatical experience identified another thinking pattern in my students' writing. That is, they preferred to think broadly and generally instead of specifically. I found this thinking pattern in papers by both graduate sand undergraduate students. For example, in my undergraduate classes, one of the assignments required students to draft a recommendation, analytical, or informative report to address a real problem at a real job setting. Though I repeatedly emphasized the importance of picking a specific, small-scope problem that existed at a job setting, most of the students chose broad, large-scope problems, such as China's economic development after the Beijing Olympics, China's status in the global economy, or building China into a world power. My graduate students chose problems of similar scope. For example, while discussing her plans for her final written project, which was intended to address a problem in the provincial human resource services where she was working, one student picked China's current educational system as the theme of her final recommendation report to her program manager. She supported her choice by citing the fact that the Chinese Communist Party had issued a call for faster development in education and by arguing that China's education as a whole needed to catch up. I suggested to her that the problem should be narrowed down to a more significant, specific local problem (e.g., a problem in her department) so that the manager could make an informed decision based on her recommendations; the manager would not be able to do anything about these large-scope problems because they were beyond her ability and managing power. This student's explanation for her choice of a broad problem surprised me. She stated that ever since elementary school, her Chinese teachers of composition had advised her and other students to focus on "big" problems like those faced by the country and the world instead of small, personal or local problems. Big problems are significant because they are related to more people; small problems are not worth discussing because they concern only a few people.

Research has provided support for a similar classification of thinking styles. For example, Kao, Yi-ming, Pei-Lan Lei, and Chuen-Tsai Sun (2008), while discussing web research strategies, identify these two thinking patterns as "global thinking style" and "local thinking style" (p. 1335). They claim that [global thinking] style users…are less likely to explore an issue in depth compared to [local thinking] style individuals" …who "elaborate on a few specific topics" (p. 1330). They also note that global thinking individuals tend to "deal with relatively large and abstract issues" while local thinking individuals tend to focus on "detailed and concrete issues" (p. 1335).

One explanation for my Chinese students' preference for broad and general issues over local and specific issues relates to their cultural focus on the collective and its deemphasis of individuals (Ding, 2006; Huang, et al, 1994; Winfield, et al, 2000). China's collectivist culture places a high value on the interests of the whole country above those of the local provinces, cities, and enterprises and institutions; and on the interests of a group over those of individuals. One way to show an individual's sense of the collective is to talk about issues faced by the country rather than issues faced by the local entities or to discuss issues faced by groups instead of individuals. Thus, global and broad issues are culturally more significant than local and specific issues for my Chinese students. Perhaps for this reason, some researchers suggest that when we communicate with our Chinese colleagues, we also play "collectivism," for example, using "we" instead of "I" and beginning a text with "general" and "big" issues followed by specific issues (Xu, 1996).

Conclusions

My discussions suggest that the technical communication program in Chinese universities is conditioned by Chinese culture. First, pedagogy of technical communication is governed by the test-oriented societal norms of a society that offers limited opportunities for too many students. Second, Chinese students in their studies are motivated by their desire to uphold collectivism, which Chinese culture stresses. Third, the broad thinking style is a textual mechanism for students to complete their written assignments and to demonstrate their patriotism. My study has the following implications for international technical communication education in China:

- Technical communication courses in China must be localized.
- When designing a technical communication course for a Chinese university, we must consider the regulations of the authorities governing selection of textbooks and course content.
- We must respect the Chinese cultural assumption of teacher as the knowledge center in class while teaching technical communication.
- Building technical communication coursework for students must be based on their rote-learning study habits.
- Any effort to help China develop its own technical communication program must accommodate the Chinese educational system, which promotes collectivism and patriotism.

As technical communication practitioners and researchers, we should, among other things, focus more on the culturally conditioned manifestations in pedagogy to help international technical communicators define strategies for approaching Chinese students. In this respect, Roberts and Tuleja (2008) have done a wonderful job in that, they studied six particular cultural challenges they encountered in teaching management communication in a Chinese university. These challenges are specific manifestations of the generalizations identified by literature about international technical communication. Based on these challenges, they "consciously adapted [their] teaching and learning practices" to help students learn (p. 485). Their efforts represent our further research into international technical communication. As international technical communicators, we must not only develop an internationally oriented approach to technical communication, but more important, we must understand practicing and teaching styles and studying and learning habits within a particular culture. We must know when and how to adapt, in Roberts and Tuleja's words, "*our* [emphasis added] strongly entrenched" (p. 476) styles and habits to a particular international communication environment. I hope my sabbatical experiences at Zhengzhou University have provided more useful information for both practitioners and researchers to develop a global approach to technical communication.

I want to stress that I do not wish, based on my experiences at one Chinese university, to make any general pronouncements about technical communication in China as a whole. I do not want either to draw any valid conclusions about millions of Chinese college students' or instructors' perceptions of technical communication based on my contact with 300 students and five instructors from one Chinese university. Rather, I just want to make some valid observations about technical communication pedagogy

and practice at one Chinese university. My experiences should serve as a small window through which we might get a glimpse of technical communication education as is influenced by Chinese culture.

Certainly more research needs to be done to investigate how Chinese cultural and societal conventions affect technical communication pedagogy and practices. Before I left China, the chair of the English department of a nearby university asked me to help her department develop a technical writing course. It is a daunting task, especially when we consider that she asked me to develop not just a technical writing course but an international technical writing course. So I suggest that we focus on the following two questions in our future research:

What role does broad thinking style play in our efforts to develop technical communication curricula appropriate to Chinese students?

How does Chinese students' sense of collectivism affect developing the curricula, especially in audience and purpose awareness?

Though I designed a technical communication course based on my interviews and surveys, it did not accommodate students' broad thinking style or their sense of collectivism. On the contrary, sometimes I purposely steered the course in a different direction, although with little success. Ding and Jablonski (2001) pointed out 9 years ago that "technical/professional writing has an important role in China's future. Hurdles in the path include changing the perceptions and attitudes of both ourselves and our Chinese colleagues working within Chinese curricula" (pp. 433–434). This statement is still valid today. What we can do is to work closely with our Chinese colleagues and adapt our teaching and practicing styles in order to define effective strategies for approaching technical communication in China.

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An Analysis of Student Comments in Comprehensive Editing

Michael J. Albers and John F. Marsella

Abstract

Purpose: A substantial skill in comprehensive editing is the ability to write constructive comments to the author. This study provides a view into how students make comments during a comprehensive edit of a technical document.

Method: Undergraduate technical editing students performed a comprehensive edit of a report. Data were derived from the editorial comments students made during the edit. Comments were coded for level of the comment (global, paragraph, or sentence), phrasing of the comment, and quality of the comment. A total of 132 comments were coded.

Results: Both effective and ineffective commenting habits were observed. Students were found to make a high percentage of paragraph-level comments and a low percentage of global and sentence-level comments. Most of the comments were rated as useful to an author. Looking at specific problem areas, most students missed commenting on four major problems within the text. The students seemed to be using a linear editing style of simply moving through the document from beginning to end, rather than using a top-down editing style or multiple passes.

Conclusions: When given instructions to perform a comprehensive edit, most students made comments that addressed global and paragraph-level issues, rather than sentence-level or copyediting issues. However, the overall quality and usefulness of the comments varied widely. As part of improving both writing and editing skills, technical communication pedagogy needs to focus more on overall document structure and how to structure sections within a document.

Keywords: comprehensive editing, editing comments, editing pedagogy, editor-author relationship

Practitioner's Takeaway

- Technical communication pedagogy needs to better focus on improving students' ability to develop editorial comments that communicate problems and potential solutions.
- Teaching students how to perform a comprehensive edit requires teaching a focus on analyzing a document's global structures and writing useful comments.
- If student editors and many nonprofessional writers work with similar levels of editorial skill, assuming similar levels of editing experience, the quality of the comments will vary widely and have a paragraph-level focus rather than a focus on higher level document structure.

Introduction

Technical text creation occurs as a joint effort between the writer and the editor, with the editor tasked with ensuring that the author's text is "complete, accurate, correct, comprehensible, usable and appropriate for the readers" and giving the writer "ways to make the document easier for readers to understand and use" (Rude, 2006, p. 12). Thus, we can, at a high level, define an editor's job as ensuring that the writer's view of the content matches the reader's view and the realistic communication uses of the text. Teaching students how to edit in a manner that achieves this match requires teaching comprehensive editing. A substantial skill in comprehensive editing is the ability to write constructive comments to the author. Although this is a valuable skill, there seems to be no research into the type or quality of comments students actually make while performing comprehensive edits. Without understanding how they make comments, we cannot know if we need to adjust pedagogy to improve their commenting ability or what type of changes may be required.

The research may also provide a view into how comments are made on workplace documents by the nontechnical editors reviewing texts. In many ways, a technical review of a document acts as a form of comprehensive edit. Student editors and many nonprofessional writers will be working with similar levels of editorial skill. They have misconceptions about the editing (or review) process and lack a full knowledge of the language to express their concerns. Engineers, programmers, and other nonprofessional writers are constantly tasked with reviewing documents. The quality of the review and comments varies, but I do not know of any in-depth analysis of how they comment. This work could provide an interesting point of comparison between working professionals and students.

Literature Review

"One of the most crucial tasks of the technical communicator is to provide information that users need by carefully selecting the right mix of content and then developing, arranging, and presenting it effectively for the audience" (Hayhoe, 2002, p. 398). Developing a text that provides that information in an effective manner often requires interacting with an editor who works at the comprehensive and organizational level. For the editor to be an effective member within the writing process, those editorial comments need to written such that the author can both understand them and be willing to act upon them (Albers, 2005). For example, in studies looking at the interaction of editors and software engineers, Walkowski (1991) and Winsor (1993) both found that these software engineers more than to have their work copyedited. They expect a comprehensive edit with useful suggestions on how to improve their text, including ideas on how to reorganize it.

Willen (2004) writes that "the primary objective of feedback is to help the writer develop a document that addresses the needs and expectations of its audience" (p. 21). This goal is achieved when the editor not only recognizes problems in a document, but also offers suggestions about how to correct them. Eaton Brewer, Portewig, and Davidson. (2008ab) highlight the need for good-quality comments, since they found that about 72 percent of comprehensive edit comments are followed. Since authors follow such a high percentage of comments, there is a substantial risk of poor-quality comments damaging a document if the author blindly follows them. Poor-quality comments can also damage the editor-author relationship by causing the author to lose respect for the editor.

Ensuring that the editor works well with the author requires that the editor make good comments. Not a particularly easy task, since as Lanier (2004) points out, "authors may easily become offended and feel that they are being criticized rather than helped by the editors. Making sure that authors are content with the editing process is important for establishing a good collaborative relationship" (p. 526). Multiple articles have offered advice on how to write those suggestions, although, with only a few exceptions (primarily work by Eaton and her colleagues), these studies provided minimal empirical evidence supporting their advice.

Comments need to focus on improving the text to meet the reader's needs, and not personal preferences (Allen & Voss, 1998).

Comments should be structured to include the rational for the change: what is wrong with the text and what can be done to fix it (Gerich, 1994). Hart (2004) stresses using comments to clarify the nature of the edit, rather than simply changing text. Authors need a

"payoff statement" that explains why they should follow the suggestion, as opposed to just giving an editorial directive (Eaton et al., 2008ab).

- Comments need a context (Mackiewicz, 2005). Authors will interpret them based on both wording of the comment itself and how they see it fitting within the text. Perceptions of whether the comment is useful or positive/negative are highly dependent on the context.
- Comments should be phrased as suggestions rather than directions to the author (Zimmerman & Taylor, 1999). As a limitation on their advice, Zimmerman and Taylor focus on copyediting rather than comprehensive editing, where a copyedit mark's appropriateness tends to be more black and white than a comprehensive edit comment. On the other hand, non-native English-speaking authors seem to need directives rather than suggestions because they experience problems parsing a suggestion's true underlying intent (Riley & Mackiewicz, 2003).
- Authors prefer comments phrased as questions rather than commands (Dragga & Gong 1989; Eaton, et al., 2008ab). However, Mackiewicz and Riley (2003) suggest using questions only when the editor's actual purpose is inquiry.
- Comments should help ensure that the document conforms to the house style, yet they must not do so at the expense of the author's voice (Allen & Voss, 1998). Of course, with both the movement to highly collaborative group-written documents and the movement toward dynamic text generation using technologies such as XML, the author's voice may have to be substantially modified to fit with the related text by other authors (Albers, 2000).

The preceding list points out that comments work best as suggestions or questions, with an underlying assumption that they are perceived as more polite and less demanding. Although this question has been examined in the context of non-native English-speaking authors, work with native English-speaking authors is not as extensive (Eaton et al., 2008ab). Riley and Mackiewicz (2003) say that directness is preferred to politeness since suggestions or questions make it harder for non-native speaker to parse the editor's intent.

Comments form a substantial factor in comprehensive editing, which tends to be described as a multilevel process (Anderson, Campbell, Hindle, Price, & Scasny, 1998; Buren & Fuehler, 1980). Editing textbooks (Rude, 2005; Samson, 1993) suggest starting at higher levels and working down; that is, the top-down editing style. The comprehensive editor must consider not only the document as a single entity, but also the coherence, structure, and style of lower levels, such as the paragraph and sentence levels. An editor is expected to identify any place within a document where any of these writing elements break down and make comments that guide the author in fixing the problems.

A substantial part of comprehensive editing is providing the author with a set of comments for improving the text. The ability of editors to make effective comments will strongly influence the strength of the editor-writer relationship (Farkas & Poltrock, 1995; Mackiewicz & Riley, 2003). Understanding why an editorial change was made or is being suggested can increase the likelihood of the author accepting the suggestion. On the other hand, authors did not like editors who undertook to rewrite the text because "it sounds better" or who made edits that changed the meaning (Gerich, 1994). Thus, developing effective commenting skills should be explicitly taught within a technical editing course.

The need for good comments is addressed in every editing textbook, but it is typically placed in terms of enhancing editor-author relationships, rather than in terms of producing quality comments. This creates a serious problem, as pointed out by Grady, Mayweather, Davis, and LaPlume. (2004):

> Indeed, editing texts are full of instructions to students on how to foster good editor/author relationships. However, students often report their surprise at the difficulty of actually choosing the right tone when writing and speaking to authors and how much they learn about the language of negotiation when conducting editor/author conferences (p. 429).

A question thus arises of how adept students are at making comments as they perform a comprehensive edit. Assuming—as seems to be apparent from the literature—that the ability to make comments is

vital for editors, technical editing courses need to explicitly focus on teaching this skill in both reading and in-class discussions. As part of learning to perform a comprehensive edit, students need to learn the following:

- How to make effective comments. The comments need to be diplomatic, provide adequate detail, and explain the issue in enough depth to justify the suggested change.
- How to focus comments on the main problems within the text. Student editors need to learn to see the higher level text problems and to clearly communicate those problems to an author.

In this study, we investigate the comments made by students during a comprehensive edit. By identifying the type and quality of the comments, we have a baseline on which to begin understanding how to better teach commenting in comprehensive editing. Exploring the typical editing difficulties students exhibit allows us to suggest to technical editing instructors which areas to concentrate on when teaching comprehensive editing skills.

Methods

Materials

The assignment was to perform a comprehensive edit of a seven-page Word document, which was a recommendation report comparing two electrical engineering textbooks. The purpose of the report was to enable a faculty committee to select a textbook for an introduction to electrical engineering course. The text was created by combining and rewriting reports created from a student report assignment into a single report. The document had errors on all levels of structure. The text contained copyedit-level errors (grammar and punctuation errors) in number and type, which were consistent with a typical student-written paper. The coursework on comprehensive editing had stressed ignoring copyediting errors until the major structural issues were fixed. Students were not expected to perform a copyedit as part of this study. Instead, they were told to focus the editing on improving the higher level problems with the text.

The samples for this study were collected from the results of a graded comprehensive editing assignment that was administered to 11 students in an undergraduate technical editing class. The assignment was completed by two students at a time in the researcher's office. The students worked separately on two computers using Microsoft Word XP on a standard landscape-oriented monitor. There was a 45-minute time limit for completing the assignment. TechSmith's Morae was used to create a screen video of the entire editing session. We acknowledge that the time limit poses a potential experimental confound and understand that many editors would prefer to print out the report to read before editing it. However, we also acknowledge the reality of how students tend to privilege finishing an assignment over doing it "by the book." Most of the students completed the assignment before time expired, and none asked about printing it (a printer was available).

All of the students were English majors, with a concentration in professional and technical communication. The editing class is structured as the second course in the concentration sequence. Although the introduction to technical communication course is not a prerequisite, most of the students had completed it. The assignment was structured as a graded assignment given at the end of the unit on comprehensive editing, which occurred about three quarters of the way through the semester. Previous class assignments included both in-class and graded assignments on comprehensive editing, which included online editing using Microsoft Word. None of the students exhibited any difficulties with Word's track changes and comments features.

The University of Memphis Institutional Review Board approved the study, and students signed the approved release to use the assignment for research purposes.

Coding the Comments

The students' comments were coded, but not their inline revisions to the text, since the study's purpose was to examine comments. Except for the students who attempted to rewrite the text, essentially all inline revisions were copyedits. The copyediting tended to be marking glaring errors and did not capture the majority of the copyedit-level problems.

The coding schema was iteratively developed (Corbin & Strauss, 2007; Creswell, 2003). It was based on the three levels of edits (global, paragraph, and sentence) and possible comment types within each level. The coding schema is described below. We started with a coding schema based on our expectations of what should be marked in the text and through the iterative process developed one that reflects actual student comments. Categories in which we expected to see comments but did not do not appear in the final schema. In this study, we were focused on what the students did comment on and not what they missed. We do acknowledge that future work needs to examine the types of editing issues students typically overlook.

Two coders independently marked all of the comments in the 11 samples. After the two coders had independently scored all the papers, they met, discussed their reasoning, and adjusted the coding so each paper had one set of codes, which was used for the analysis.

We defined a comment as a block of text related to a single idea or concept. In some instances a single comment contained multiple phrases or sentences. Tables 1, 2, and 3 show example comments which we considered one comment, although many have multiple sentences. In two cases, the editor used one Word comment "bubble" to house more than one comment. In these cases, each comment was coded independently.

The coding schema analyzed three factors. Each comment was coded for three different attributes.

- Level of structure commented on (global, paragraph, or sentence)
- Type of comment (direct or indirect)
- Quality of comment (good or poor)

Besides coding the edited document, we reviewed the Morae recordings for each subject. The video was not coded, but was used as support for the findings on the comments. Our initial review of the Morae recordings found few actions specifically associated with making specific comments, such as scrolling up/down before making the comment. The recordings could have been useful for an overall analysis of how students approach editing, but that was outside the study's scope.

Within each of the attributes, the following set of codes was used.

Level of Comment Based on a top-down editing structure (Rude, 2005; Samson, 1993), the comments were coded based on the level of change they reflected: global, paragraph, or sentence. Within each of these three groups, the specific type of comment was also coded. Tables 1–3 show examples of each type of coding.

Global

Whole document	Suggestions on document-wide consistency, structural, or organizational issues.
Section level	Suggestions on section-wide consistency, structural, or organizational issues.
Global word choice	Suggestions on wording problems that needed to be addressed throughout the document.

Paragraph

Need for specific content	Suggestions that pointed out that specific content either is missing or should be added to better develop the argument.
Revising content	Suggestions that assumed the content was present but needed to be reworked. The editor may be pointing out redundant information or asking for justification on the inclusion of the content in question.
Order of information	Suggestions that addressed the order of information within paragraphs.
Format and design	Suggestions that addressed the proper use of subheadings or indicated inconsistent formatting structure.
Presentation	Suggestions that addressed the way information was presented: the editor suggests information delivery via lists, figures, and tables.

Deletion	Suggestions that recommended the deletion of partial or even entire paragraphs owing to needless or redundant information.
Sentence	
Meaning and clarity	Suggestions that asked for a revision of the sentence for clarity or meaning. The editor may indicate the need for more information in order to have the sentence make sense in the context of the paragraph.
Grammatical	Suggestions that asked for grammatical and mechanical changes, such as punctuation issues, subject-verb agreement, or run-on sentences.
Revision of sentence	Suggestions that asked for a rewrite of an entire sentence, which often stemmed from poor flow or imprecise wording. Sentence revision comments differ from meaning and clarity comments in that suggestions for revision tend to deal more with stylistic issues.
Word change	Suggestions that asked for word changes. The author may have used a word incorrectly or imprecisely.
Deletion	Suggestions that ask for deleting an entire sentence. This normally occurs when the sentence is redundant or unnecessary.

Type of Comment

The phrasing of the comment can affect how the author perceives it and how it influences the editor-author relationship (Dragga & Gong 1989; Eaton et al., 2008ab; Riley & Mackiewicz, 2003; Zimmerman & Taylor, 1999). The comments were coded as direct or indirect, with subclassifications that reflect the comment's content.

Direct Comments	
Question	Phrased as a question to ask the author's intention or solicits justification of the text.
Directive	Phrased to openly express the editor's intent and offers direct editorial observation. It instructs the author to make specific changes to the document.
Comment	Phrased to have no implication regarding a revision to the text. For example, the editor may be simply stating that the sentence or paragraph is well written.
Explaining edit	Phrased as a justification or rationalization of an editorial change.
Indirect Comments	
Directive as question	Phrased in an interrogative fashion, although the intent and tone is that the author should make the change.
Directive as comment	Phrased as a superficially offhanded comment about the text, but with an intent and tone that the author should make the change.

Quality of Comment

Comments were coded as either good or poor based on how understandable or usable they were with respect to making text changes. As Willen (2004) mentions, editorial quality rests with the editor's ability to recognize problems and make clear, understandable suggestions for revisions. In many instances, the difference between a good comment and a poor one was a matter of clarity; in other instances, it was the

editor's skills (or lack thereof) at identifying and explaining problems.

For this coding, comment quality was a binary assessment: good or poor.

- Good — Clear, direct, and, if followed, should produce positive results for the document.
- Poor — Muddled, unnecessary, or ineffectual; a poor comment will not benefit the document and may in some cases degrade the quality of the document if followed. A poor comment was not always a wrong or misplaced comment, but the wording was not sufficient or appropriate for a writer to effectively act upon it.

We acknowledge that a finer grained evaluation of the comment quality would have been preferable; but for this exploratory study, the comments did not lend themselves to a finer grained coding. In addition, the final metric of comment quality would be how well it helps an author modify the text. Since this an editing exercise and the edits were not returned to an author, we were not able to make that judgment. Instead, as coders, we had to make that judgment for an imagined author. Finally, we were more concerned with the poor/not poor split. That judgment was easier to make since the poor comments tended to have little usable content. For example, if the comment said "this paragraph is vague," how was an author suppose to revise the paragraph when nothing explains what aspects are vague?

Results

Among the 11 sample assignments, 132 comments were made. Nine students finished the assignment to their satisfaction within the 45-minute time limit. Two students took a more heavy-handed approach and attempted to rewrite the document instead of offering suggestions to the authors. As a result, they only worked with the first 25% to 30% of the document before the end of the 45 minutes.

The number of comments per person ranged from 3 to 23. The lowest three (3, 4, and 6 comments) included the two students who rewrote the text rather, and one who made mostly single-word changes within the text. After these three students, the number of comments jumped to a range of 10–23, with 6 of the 11 students making 10–16 comments.

We did not test for statistical significance because of the small number of subjects. Instead, we tied the coding back to specific editing examples to help reveal some specific problems that should be directly addressed in teaching comprehensive editing.

"How to edit" articles and textbooks typically advise reading over the entire document before making any edit marks. In this study, five of the 11 students looked through the document first; however, four of those five spent only one to two minutes looking over the text. Obviously, this means they could not have accomplished more than briefly skimming it. One student spent almost five minutes reading the text. Three students (including the two who did a rewrite rather than an edit) used a very linear editing style that started at the top of the document and moved down with minimal scrolling. The other students scrolled up and down many times, obviously comparing between sections, before making comments. On the other hand, all students edited the document in a single pass; no one used the approach advocated by editing articles and discussed in class of performing multiple passes through the document and looking for specific items on each pass.

The Morae videos showed that most students were scrolling up and down throughout the editing process, so we assume they were working to maintain a mental image of the overall context of the specific paragraph they were editing.

Summary of the Coding

Of the 132 comments collected, the global level was the least commented on: only 11 comments (8%) were made on this level (Figure 1). Paragraph-level comments were the predominant level, with 81 comments (62%). There were 40 sentence-level comments (30%).

Global Level Six students (54%) made at least one global comment (maximum was three comments), for a total of 11 global comments (Figure 2). Within the global level, eight comments address section-level issues (Table 1). Although the number of section-level comments looks encouraging, half of them identified the need to expand the conclusion.

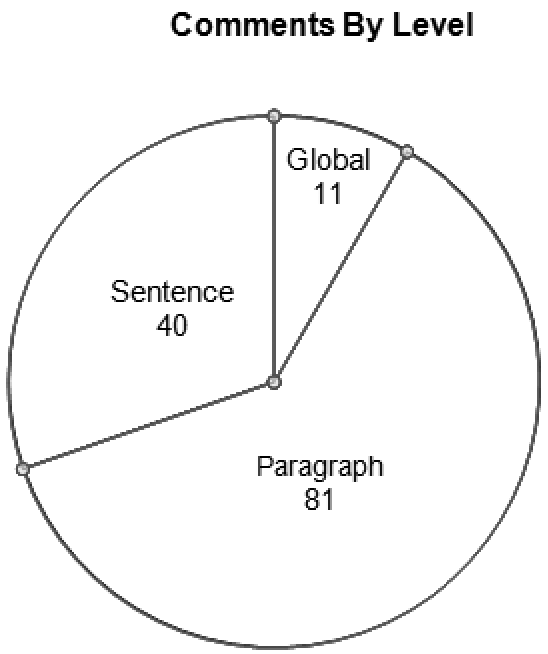

Figure 1. Comments by level

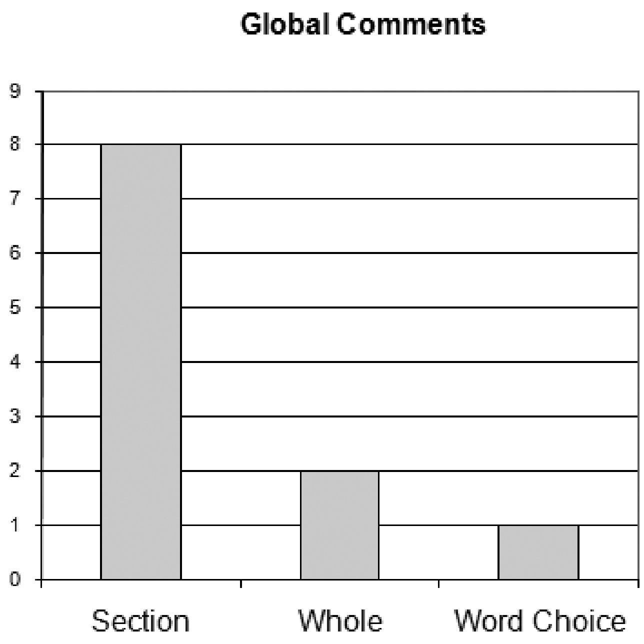

Figure 2. Global-level comments by type

Excluding the global comments about the conclusion, there was no consistent placement of global comments within the text. Some of the comments, while global, tended to not provide usable guidance. For example, "Introduction is vague. Be more specific," tells the author the introduction is vague without providing any feedback on why the editor feels it is vague or how to improve it.

Paragraph Level More than half the comments were paragraph-level comments. The breakdown by type is shown in Figure 3. Of the 68 paragraph comments, 53 directly addressed content or presentation (Table 2).

Sentence Level More than half of the sentence-level comments dealt with sentence meaning (14 times) or asked for a rewrite to make the content clearer (9 times) (Figure 4). Table 3 shows that grammar was called into question only
once, word choice 10 times, and sentence rewrites 9 times. This puts half of the sentence level edits at the copyedit level.

In general, based on the ratios of paragraph-to-sentence-level edits and the extent of comprehensive sentence-level edits, the students clearly remained focused on comprehensive editing issues and avoided simply performing a copyedit. On the other hand, because copyediting revisions were made in-line with the text and this study looked only at the comments, copyedits were not analyzed as part of the coding.

Type of Comment Hart (2005) writes that "the goal [of editing] is to constantly reinforce the notion that [the editor is] *proposing* rather than demanding changes" (p. 27). Mackiewicz and Riley (2003) discuss the importance of politeness and also mention that indirect comments are typically perceived as more polite. The comment's tone can determine the author's opinion of the editor: One harsh-sounding comment could cause the author to ignore the editor's work wholesale. Editorial comments can be divided into two main types: direct comments and indirect comments. With direct comments, the editor is directing the author to make a revision, while with indirect comments, a more passive approach is used, with the intent that the author will make revisions as the editor intended.

Direct comments made up 99 (75%) of the 132 comments (Table 4). Of those, 19 comments were posed as questions. Editors used indirect comments in 33 instances. Most students made at least one indirect comment; typically 10%-30% of the comments by each student were indirect. Explanations of edits occurred only 12 times. It seems that students considered their edits to be self-explanatory and not requiring justification. Most edit explanations were justifying deletions or word changes.

Quality of Comments Poor comments tended to be of minimal use to an author needing information about what to actually change, such as "repetitious" and "begin under Criteria." They also included page layout comments that were not appropriate at this stage of editing, such as pointing out orphaned sentences.

A few students made most of the poor-quality comments (24 total) (Table 5). Three students made a total of 14 comments rated as poor. The student-by-student breakdown for those three is as follows: 5 comments with 4 rated as poor, 10 comments with 5 rated as poor, and 16 comments with 5 rated as poor.

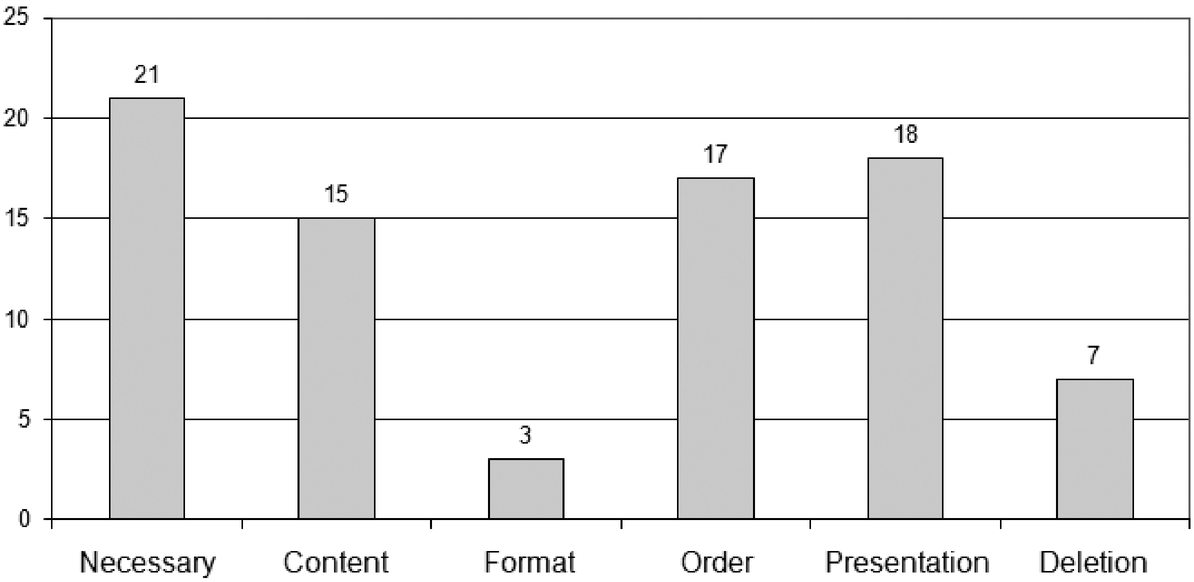

Figure 3. Paragraph-level comments by type

Table 1. Global-level comment examples

Comment type	Number	Examples
Section level	8	• Give an Executive Summary of the analysis. • After the chart, you need to write a brief conclusion and give a recommendation. Sum up all the information that you just presented in the chart.
Whole document	2	• You were too passive in your analyses of this book. Consider going back and being fair and concise in your evaluation.
Global word choice	1	• You need to stay in the same tense. Is it past or present?

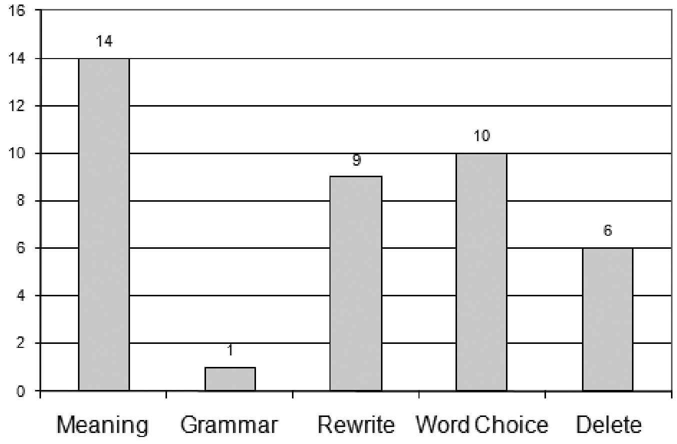

Figure 4. Sentence-level comments by type

Also, the two students who did a rewrite had a total of seven comments, with five rated as poor.

Identifying Major Problem Areas

It appears that most of the students grasped the basic concept of how to perform a comprehensive edit and can make solid, constructive comments. Ignoring the students who tried to rewrite rather than edit the text, we found that most of the others produced a consistently high number of comments that were basically of good quality.

However, in addition to the ability to construct good comments, learning to edit includes developing the ability to spot major problems within the text. A group of editors working on the same document should produce a relatively consistent set of edits. At the very least, most (if not all) of the major problems within the document should be marked. That situation, however, was not evidenced in this study. In reviewing

Table 2. Paragraph-level comment examples

Comment type	Number	Examples
Necessary content	21	• List the criteria. Why make the reader wait? • This topic was not mentioned in your introduction at all. Either insert it into the introduction or delete it.
Content	15	• This is a lot of information to put into this report. Is this necessary for your audience? • Your language turns toward a lay audience in this paragraph. Consider adding more information about the book instead of making it so passive.
Format	3	• Use subheadings for each of the books. • Make white space between level 1 titles and the previous text smaller.
Order of information	17	• Organization and layout should be first as it is in the evaluation section. • It seems more logical to discuss the chapter beginning before the end. • Should this paragraph be made to fit in the first paragraph?
Presentation of information	18	• I would suggest a list. • You could also use a table to address some form of organization criteria.
Delete paragraph	7	• I would assume that the only people who would be reading this analysis are the college faculty and staff members. They know the process they go through every year. Just get straight to your evaluation. • This section should be deleted since it isn't necessary and does not follow the report format.

the comments, a lack of consistency in pointing out significant problems was noted. The specific problems found tended to not be the major problems, but rather a random collection of problems, which varied by student. To explore this further, we examined the comments made about four significant problem areas (Table 6).

In general, most of the students missed any one specific problem. Fewer than half the students noticed each of these major problems within the text. One student noticed all four problems, and three others noticed three problems (interestingly, these three all missed the Equivalent Circuit section problem).

Discussion

The results of the study have significance for teaching the comprehensive editing segments of a technical editing course.

We, as technical editing instructors, must direct students toward effective editing habits, such as a top-down editing style. The lack of global-level comments, when coupled with the failure to gain an overview of the document before beginning to edit, may reveal that they are not using a top-down editing style. Instead, students seem to be using a linear editing style of simply moving through the document from beginning to end. Additional support for that assumption came from the Morae video, which showed that only one student reviewed the entire document before starting to edit. The others all started reading/editing from the beginning without gaining an understanding of what the document contained. Granted, top-down editing is covered in essentially all editing classes, but perhaps the discussion can be combined with working through specific global-level examples to help the students contextualize its advantages.

It appears from the linear editing style and the fact that the majority of comments were at the paragraph level that the students focus on working with the text at the paragraph level rather than considering how those paragraphs fit together within a section or a document. A possible explanation is that students have had minimal exposure to writing text that is divided into sections.

Table 3. Sentence-level comment examples

Comment type	Number	Example
Meaning\clarity	14	• Not defined—should be defined in the second sentence if using the acronym. • Why was this a disadvantage?
Grammar	1	• Should circuits be plural here?
Rewrite	9	• Too many sentences are beginning with “the book.” • This phrase sort of belittles the reader. • You should reword this sentence. It is unclear whether you mean the lack of important concepts was a disadvantage or the lack of color concepts was a disadvantage.
Word choice	10	• Be consistent. In the first paragraph you were specific about which circuit course. • You should avoid using the word “good” since it is too vague.
Delete sentence	6	• The background information is unnecessary. • This sentence should not be here because organization and layout are not discussed in this paragraph.

Almost all of their academic writing has been long prose paragraphs in texts with no headings, often composed in a single (or minimal number of) draft(s). In addition, students typically have not seen real edited documents. Their worldview of comments is the comments we, as instructors, make on their papers. Unfortunately, from a technical editing viewpoint, academic paper comments and technical editor comments are very different. Early in the semester, it may be worthwhile to discuss this difference in writing comments, explain the reasoning, and specifically point out how the goals of grading a student paper and editing a technical document differ.

A significant area of concern is the failure to consistently identify the major problems within the

Table 4. Type of comment examples

Comment type	Number	Example
Direct comment: Directive	64	• Insert a bulleted list of your criteria here. • Make white space between level 1 titles and the previous text smaller.
Direct comment: Question	19	• There is not enough information given about the background. Why are these the chosen books to be evaluated? • How is the complexity reasonable for the students? Are the students able to follow the material with understanding?
Direct comment: Comment	4	• These criteria for figures are not always covered exactly in evaluation. • The following paragraphs are just restating the tables.
Direct comment: Explaining edit	12	• This is already stated in the introduction paragraph. • The word “problems” is ambiguous. You should use “exercises” to make your meaning more specific.
Indirect comment: Directive as question	5	• Shouldn’t this paragraph be in the criteria section? • Should this paragraph be made to fit in the first paragraph?
Indirect comment: Directive as comment	28	• This sentence should not be here because organization and layout are not discussed in this paragraph. • A teacher for this course should know this already. It seems like you’re talking down.

Table 5. Quality of comment examples

Comment type	Number	Example
Good quality	108	• The comments given as examples in tables 1, 2, and 3 of this article were all rated as good quality.
Poor quality	24	• Repeats first paragraph. • Not needed. • Move this section up to the previous page. • Need stronger conclusion than tables.

text. Fixing many of the problems identified in the students' comments would not significantly improve the document's ability to communicate information. Willen (2004) suggests teaching guidelines for commenting to technical communication students, and that a specific protocol should be introduced so that they can comment effectively and with purpose. Also, it is hard to write or teach a guideline that addresses global-level issues without either being too vague to be practical (such as "ensure that the sections form a coherent whole") or being written for a specific document type and context (proposals for company X). Use of editing checklists may help, although typically checklists seem to be used as a "have I done everything" reference consulted at the end of the editing project. More than teaching students to follow a checklist, course pedagogy needs to help the students internalize what would appear on a checklist. This is an interesting catch-22 for teaching, since helping students internalize a checklist requires repetition and working in class with documents long enough to contain global issues. Yet limited class time severely restricts students from working with documents of sufficient length.

Table 6. Consistency of identifying problem areas

Problem area	Students who commented
Lists and graphics (The text had no lists or graphics. Much of the analysis lent itself to bullet lists and summary tables. Also, the quality of the book's graphics were mentioned, but examples were not given.)	5
Evaluation Criteria section (This section was written as a single long paragraph containing multiple topics.)	4
Equivalent Circuit section (Other sections evaluated each book in a separate paragraph; this section combined the evaluation into one paragraph.)	3
Conclusion (Conclusion was two tables, with no paragraphs interpreting the tables and recommendation.)	5

Classroom Implications

The student editors seem to have a grasp of paragraph-level skills; Figure 3 shows that more than half of the comments dealt with content issues. Based on this factor, students seem to be able to evaluate content at the paragraph level, but not at a higher level. The students created comments aimed at the paragraph level, rather than creating comments that addressed the higher levels of the text and placing those comments into the context of the overall text. Or perhaps they had noticed the section-level problem, but had worded the editing comments at the lower level of giving direct "fix this" comments. This study was unable to discern the mental processes and logic the students used when deciding to write a comment. Discussions in which they have to justify why the comment was written as it was could prove beneficial, since they would expose how the student was actually seeing the problem. Editors and writers both need to understand the more general text problems, rather than just give or receive specific "fix it" comments. Unless the comment inspires the writer to see the bigger problem, the writer might not see the relevance of the comment.

Bereiter and Scardamalia (1987) point out that composing pushes the writer almost to the point of cognitive overload. We have no doubt (although this study did not measure it) that editors also work very close to cognitive overload. If the students suffered cognitive overload, it would have led to tasks being dropped—reducing the scope of problems looked for—and lowered editing quality. Emphasizing the need for multiple passes through a document (which none of the students did) should reduce overall cognitive workload. At some level, the lack of multiple passes may be related to students' developing editing skills. Just as a beginning writer tries to write a single draft document, only experienced editors and writers understand the need for multiple drafts. Stressing multiple-pass editing for class assignments should also help address the problem of lack of consistency. With an edit pass focused on a smaller set of edits, the student should be able to spot problems more easily. How to teach multipass editing

in a manner that motivates students to use it remains an open question.

In general, improving comment quality should itself enhance the editor-author relationship. The overall tone of the comments in this study would not hurt an editor-author relationship; none of them were phrased as an attack on or were demeaning to the author. But too many of the comments noted in this study only partially addressed the problem and would leave the author wondering what the editor really wanted. For example, a comment of "Should this paragraph be made to fit in the first paragraph?" fails to explain why the editor believes it should fit into the first paragraph. The need for a "payoff statement" that explains the reasoning behind the suggestion should be a part of learning to write comments (Eaton et al., 2008ab). A potential in-class exercise may be to show a paragraph with editorial comments and discuss problems with the comments and how to improve them. As a lead-in to discussing those comments, a discussion of what an author wants regarding a comment is helpful, since it will prime the students to evaluate the comments from an author's viewpoint.

Global Comments The type and quality of the global comments can provide an indication of a student's overall editing ability.

As instructors, we can examine the student's global comments to obtain a feel for how well the student is learning to view editing as a task performed on a text as an integrated whole. For example, most of the global comments noted in this study were specific to a section and never worked to connect sections. Likewise, we as educators need to consider whether the students' comments are simply reflecting what is emphasized in class. Most of the global comments were about considering audience, but we need to question whether the students are really internalizing the need to consider audience or simply feel they must make some sort of comment about audience. The quality and wording of the comments can directly reflect this internalization. If the course has emphasized other areas that are problematical in the document but not reflected in the comments, we need to examine how the material is being taught to determine why.

Connecting the global comments with overall student performance, we found the students who made the global comments were the students who performed higher overall. At one level it would seem obvious that the better students would demonstrate a higher level view of editing. But, more important, this also provides a means of tracking students' development as editors. Over the course of a semester, the number of global comments should increase. Students tend to split into two groups: those who see the problems but cannot explain them and those who still need help identifying the problems. Both groups are developing as editors but are at different stages in that development and need different types of help.

In the first group, there are students who are seeing the problems but need help communicating the suggested changes. Typically, they make comments that make sense to themselves but lack sufficient detail for someone else to act upon, or they know what the problem is but cannot figure out how to explain it. Either way, they need help in clearly saying what they want to say. The second group of students needs help grasping the higher level editing concepts. They seem to rely on their writing ability and give good paragraph-level advice, but fail to consider how to connect the paragraphs into a cohesive text. Here, there exists a forest-and-tree problem, with the student needing help to see that the forest matters as much as the trees. One exercise I have found that works is to do a paragraph-level outline of the text. The problem areas and lack of cohesion tend to jump out when each paragraph has been condensed to a phrase.

Conclusion

We are encouraged by the fact that most of the comments addressed global and paragraph-level issues, rather than sentence-level or copyediting issues. On the other hand, the quality of comments varied widely. Thus, we need to consider how to improve the students' ability to develop comments that clearly communicate problems and potential solutions to an author. Of course, this should be an overall objective of any writing or editing class.

It seems that students understand how to make good comments; however, students are not consistent in their editing and cannot consistently spot major problems in a text. At one level, this may be because students are still developing skills as writers and editors. But this situation also means we as educators need to include more class

work, both before students reach the editing class and during the editing class, on how to consider overall document structure and how to structure sections within a document. Editing skills are not divorced from writing skills, but rather are an essential extension of them.

Limitations

The small sample size clearly prohibits making any general claims. Also, the work was done as a timed quiz. If given more time, some of the students might have written more comments or expanded on the ones they did write. However, since many of them finished before the time limit, that may or may not be a factor. A comparison with the same assignment done as take-home work should prove interesting.

Future Work

This study looked only at a snapshot of students' editing skills. We need to examine changes in their commenting ability during the semester-long development of their editing skills. A comparison study of beginning versus end of the semester or editing unit would be helpful. Obviously, regardless of the starting point, both poor and good students should improve over time. However, we need to understand the actual progress sequence within that improvement so we can make pedagogical adjustments to increase it. We need a clearer picture of which skills a developing editor develops first and which lag.

We need to consider how to better teach editing for global issues and overall document structure. We need to better understand how to instruct writing high-quality comments and editing for larger structural (global) problems in a text. Students can identify paragraph-level problems but are very inconsistent with global issues.

Performing a comprehensive edit could, at one level, be considered making revision decisions about a text. If people are revising their own text, obviously they then make the change. When editing another person's text, rather than making the change, the editor must create a clear and useful comment explaining the problem and potential solutions. This brings up the question of whether or not an editor's ability to perform a comprehensive edit is related to that person's ability to revise texts. Thus, the editor faces two challenges. First, the problem must be identified and, second, the problem must be communicated to the author. Writing and revising texts at a whole-document and section level are skills students are still developing, but one that is essential to their future work as professional technical communicators. The sample size of students and the extent of this study were too small to be able to draw any conclusions about relationships between revising and editing ability, but this remains an important research question that should be pursued. The answers could help shape classroom discussions on topics such as organizing texts and writing style.

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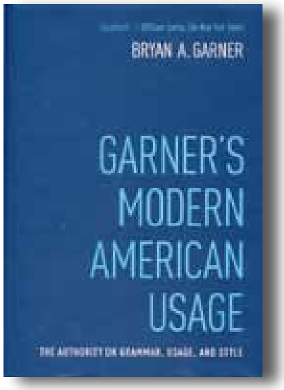
Avon J. Murphy, Editor

Books Reviewed in This Issue

Garner's Modern American Usage

Bryan A. Garner. 2009. 3rd ed. New York, NY: Oxford University Press. [ISBN 978-0-19-538275-4. 942 pages, including index. US$45.00.]



In his preface to the third edition, Bryan Garner writes, "The mark of a genuine scholar is never to leave an answerable question unanswered" (p. xi). After living with this book for several months, I can honestly say that Garner is a genuine scholar. His erudition and love of language shine through on every page and in most entries.

For previous readers of Garner, his new Language-Change Index is an exciting addition. Changes to usage are categorized by one of five stages: (1) rejected, (2) widely shunned, (3) widespread but still avoided in careful usage, (4) ubiquitous but opposed by linguistic stalwarts, and (5) universally accepted. So you can look up your pet peeves and see where they stand. For example, I'm glad that *email* (not *e-mail*) is in Stage 4.

Previous readers will also be interested in the doubling of new entries, the identification of poor usage by asterisks, and the expanded glossary of language terms. But new readers will be captivated by the many topics Garner addresses. For example, in his entry on *initialese* (the overuse of abbreviations), he directly criticizes technical writers for allowing the proliferation of abbreviated terms, requiring the reader constantly to refer to their original uses to grasp meaning.

Garner's sense of humor is always near the surface of his writing. As a native Texan, he is sensitive to the pronunciation of the letter *w*, which in Texas comes out as "Dubya" and is now the nickname of the 43rd U.S. president.

Some of his entries are right on the mark. Take *sexism*, for instance. As an adjunct professor, I'm well aware that contemporary students have little understanding of the underlying problems of language change and no clue of the politics that engendered them.

But some things puzzle me. Garner has separate entries for *disabled* and *handicapped* and makes no mention that the former is the preferred term by the disabled and their supporters. I'm also bothered by his approval of *illegal alien*, which Garner calls the "usual and preferred term in American English." Preferred term by whom? FOX News and members of the Tea Party? It is an offensive term to immigrants and only serves to make people angry.

Despite these criticisms, Garner's book is by far the best on contemporary usage. For language lovers or for those attempting to find out how words are being used today, *Garner's Modern American Usage* is an indispensable tool.

Charles R. Crawley

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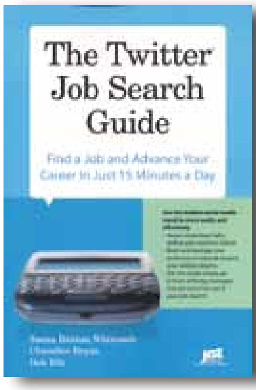
The Twitter Job Search Guide: Find a Job and Advance Your Career in Just 15 Minutes a Day

Susan Britton Whitcomb, Chandlee Bryan, and Deb Dib. 2010. Indianapolis, IN: JIST Works. [ISBN 978-1-59357-791-9. 242 pages, including index. US$14.95 (softcover)].



The Twitter Job Search Guide is for anyone, regardless of their Twitter experience, who wants to build a professional brand, expand their professional network, or search for a job. The authors have written an excellent book offering advice from their career, personal branding, and social media expertise. You will learn and explore

- How to build a personal brand and strategy in 15 minutes a day
- Stories from Twitter users who build online visibility
- How to communicate on Twitter to build new relationships ("tweeps")

- Wisdom from experts in social media and personal branding

This book is broken into seven sections, with 32 chapters and an appendix, which provides tips from career experts and information from successful Twitter job seekers. The chapters, most of which are three to six pages long, are full of practical information and easy to read quickly. You can navigate to topics of personal interest depending upon your Twitter experience, job search mode, and time available.

The most relevant chapters for technical communicators include "Your Brand and Twitter," "Job Search Advice from the Trenches," and "Maximize Twitter in Just 15 Minutes a Day."

You'll learn how your personal brand and social media fit together and how you can use this to strengthen connections with employers. Coauthor Deb Dib's Brand to Land Plan outlines four brand essentials to help you get hired faster: personal brand, career brand, brand statement, and branded value proposition.

Ten rules for searching in a new economy include how to articulate your assets into a compelling brand by writing concise marketing materials such as your Twitter bio. You're also encouraged to build relationships with specific companies by targeting them before they publish job openings. The chapter on maximizing Twitter helps you organize your 15 minutes a day productively on Twitter (after you create your account and learn the basics). Coauthor Chandlee Bryan's handy checklist provides detailed recommendations to grow your network and manage your strategy in four weeks.

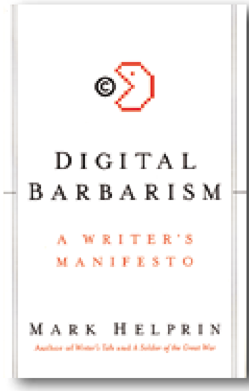
Twitter can be overwhelming with all its features, but this book is organized clearly into simple steps to provide goals to help you achieve success. Overall, Whitcomb, Bryan, and Dib present excellent strategies for inspiring you to create a professional brand on Twitter (even if you haven't created a Twitter page yet) and have written a recommended resource for those in the job search process.

Angel Belford

Angel Belford is a senior technical writer/editor with a BA and MA in scientific and technical communication.

Digital Barbarism: A Writer's Manifesto

Mark Helprin. 2009. New York, NY: Harper. [ISBN 978-0-06-173311-6. 232 pages, including index. US$24.99.]



Writing in the *Wall Street Journal* in 2005, Mark Helprin argued, "If you must go to war, do not do so hesitantly, with half a heart." He takes his own advice in his aptly named manifesto, *Digital Barbarism*, in which he declares war on teachers, librarians, college professors, computer programmers, environmentalists, and NASCAR fans, among others. Helprin defends a copyright system he sees as under assault from a variety of cultural and technological forces. His central thesis: "The rights of authorship, the most effective guarantor of which is copyright, protect fact from casual manipulation; slow the rush to judgment; fix responsibility; encourage conscience in assertion and deliberation; and protect the authority of the individual voice, without which we are little more than nicely yoked oxen" (p. 66).

Where Lawrence Lessig and other critics of current copyright law see copyright as stifling creativity, Helprin says copyright promotes creativity by forcing artists to create new works rather than reworking existing ones. For Helprin, it's about more than just creativity, however. It's about the rights of authors to control and profit from their work. Even more than that, it's about preserving the individualist spirit in an increasingly collectivist world, and Helprin holds the latter in Ayn Randian disdain. "Very clearly," he says, "the choice is between the preeminence of the individual or of the collective, of improvisation or of routine, of the soul or of the machine" (p. 217).

Unfortunately, Helprin undermines his argument by wrapping it in ultraconservative politics that disapprove of modern culture and visions of equality and inclusiveness. He distrusts digital media and dislikes gender-neutral language. In his view, the university is "a privileged semi-socialist anomaly sustained from without by the wealth of the market economy it disdains" (p. 213). Teachers are "factory-floor soviets" (p. 54). Online

writers who disagree with him are "armies of blogging ants steeped in self-righteous anger" (p. 202). The invective comes less in a stream than through a fire hose.

The points Helprin makes deserve consideration, though: Why should intellectual property not share the same quality of perpetual ownership as other forms of property? What public good is served by having a creative work fall into the public domain after a certain number of years, and does this public good outweigh the creator's ownership rights? Should others have the right to alter, adapt, or remix a creative work? What can be done to ensure that orphaned works remain available to those willing to pay appropriate fees? How can we best ensure universal access to art and knowledge? These are all worthy questions.

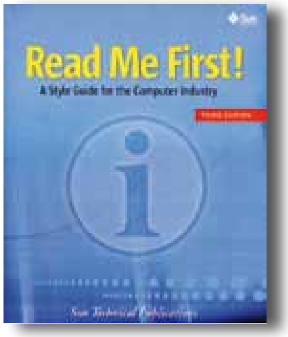
Academics will find Helprin's anti-intellectualism distasteful. Women will find his gendered language offensive. Readers who have an interest in intellectual property and digital media and who can withstand Helprin's rhetorical rockets, though, will find that *Digital Barbarism* fires some useful volleys onto the battlefield of ideas.

Marilyn R. P. Morgan

Marilyn R. P. Morgan has an MA in English from the University of Tennessee. After serving as a technical writer and editor in academic and government research organizations, she now works as a freelance writer and teaches English at the college level. She has been an STC member since 1993.

Read Me First! A Style Guide for the Computer Industry

Sun Technical Publications. 2010. 3rd ed. Upper Saddle River, NJ: Prentice Hall. [ISBN 978-0-13-705826-6. 462 pages, including index. US$49.99 (softcover).]



Whether you need an off-the-shelf style guide or are just looking for a starting point from which to produce your own in-house guide, *Read Me First! A Style Guide for the Computer Industry* is sure to meet your needs. In the years since its first publication in 1996, *Read Me First!* has established itself as a standard reference in the industry. Now, with the release of the third edition, it has grown in both size and usefulness.

Like previous editions, the third edition has won praise from luminaries in the field. JoAnn Hackos recommends it for those who "need to understand the best practices for developing useful and usable text," while usability guru Jakob Nielsen has said it is "clear, consistent, and presents advanced topics in an actionable and approachable manner" (back cover).

Read Me First! contains all of the standard features one would expect. It is an excellent reference for the basic mechanics of writing. It provides good advice on organizing and constructing text and choosing an appropriate writing style, and it includes discussions of the special considerations for online writing and for writing for an international audience. It covers constructing links; writing tasks, procedures, and steps; writing glossary entries; indexing; and so on.

At 462 pages, the third edition is more than 100 pages longer that the second edition (2003; reviewed in the February 2004 issue of *Technical Communication*). Changes and improvements have been made throughout. The list of terms commonly looked up for meaning and usage has been greatly expanded. The section on handling numbers and numerals has been expanded and placed in a table; the section on typographic conventions has been expanded and moved to an appendix. A new table gives the names and meanings of common symbols. New tables have been added listing anthropomorphism and common

idioms and colloquialisms to avoid because they cause confusion, with suggested alternatives.

The guide contains new chapters to help you keep pace with an ever-evolving industry. For example, a chapter on structuring information discusses various strategies for organizing information and gives guidelines for their use. A new chapter helps you meet Section 508 accessibility requirements. (Section 508 of the U.S. Rehabilitation Act specifies that all electronic and information technology used by the federal government must employ assistive technologies to help those with sight and hearing impairments. Many companies have adopted the requirements as well.) One of the key techniques for meeting these requirements is to write alternative text for non-text elements. The chapter gives general guidelines for writing such text, including how much to include based on context. It also discusses special situations such as describing simple graphics such as symbols, logos, and icons; complex graphics such as screen captures and technical illustrations; diagrams such as flow charts; mathematical equations; and multimedia content.

Another new chapter discusses creating screencasts, which are digital recordings of computer screen output presented as video, often with audio narration. The chapter walks you through the entire process from creating a storyboard, to writing and recording narration, to managing the review process, to deploying the final screencast.

The editors now include a chapter that addresses the rising interest in using wikis for documentation. (The chapter warns that the determination as to whether a wiki is appropriate to your purpose or audience is outside its scope.) For those considering using a wiki, it discusses wikis and collaboration, the value of having prior publications expertise, and organizational and navigational guidelines. It also includes guidelines for wiki writing, wiki terminology, and wiki visual design.

An appendix on developing a publications department covers everything from forming your team to developing schedules, to managing the entire documentation process (including managing reviews), to printing and publication, to postproduction considerations. To help with administration, the editors include common publication forms and checklists. The recommended reading list and suggestions for additional resources have been thoroughly expanded and updated.

Summing up, this new edition is comprehensive, easy to use, and deserving of a place on the desk of anyone serious about best practices in the industry.

Patrick Lufkin

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Wisdom and Management in the Knowledge Economy

David Rooney, Bernard McKenna, and Peter Liesch. 2010. New York, NY: Routledge. [ISBN 978-0-415-44573-3. 260 pages, including index. US$85.50.]

The authors of *Wisdom and Management in the Knowledge Economy* take on the heady subject of the largely overlooked attribute, virtue, and potential leadership tool of wisdom. Their thesis, of course, is that business management, and society by extension, would be well served to cultivate such an attribute. "Wisdom," they write, "is one of the least understood aspects of management practice but possibly its most important aspect" (p. xi).

Tracing wisdom from its prominent status in Hellenistic philosophy to its overlooked station in modern times, the trio draws out the volume much like an extended literature review. In fact, the study is deeply scholarly and theoretical. What forays into the pragmatic the authors make are so steeped in the language of academia that it is difficult to realize they have made a detour at all. Practical wisdom is cast as *phronesis*, and the overall work is positioned in discourse theory. This is all good for someone in graduate school, whether on the teaching or the learning end, but it will gain little purchase with the everyday practitioner of business or technical communication. I would challenge any technical communicator to use the following during a project debrief: "wise people

understand the constructedness of phenomena in particular places and times” (p. 80). To be fair, the book wasn’t written for such a purpose. It is a scholarly book for scholarly pursuits.

In their historical rendering of wisdom, the authors note that while wisdom enjoyed strong prominence during most of the course of the western philosophical tradition, it has gone into stasis in recent years, regrettably. The challenge is not only to resuscitate the body of work but to exercise it in management and organizations. The authors note that in our knowledge and information economy, there should be ample space wisdom. They point out several classic case studies wherein a lack of wisdom led to some serious impacts, both ethically and financially. Enron is one such example.

In the chapter probably of most interest to *Technical Communication* readers—aptly entitled “Communication”—the writers examine communication practices in organizations and question how wise communication practices can be developed. They then expand on five principles of wisdom as they relate to communication. While I don’t have the word count to adequately explain those principles here, I can say the authors ultimately conclude that wise communications require the effective use of tactics—speaking and writing—as well as liberal amounts of intangibles such as intuition and empathy. These aren’t your typical business school topics and, as the authors point out, this is something of a problem. Wisdom, like ethics, should be core to any business management curriculum.

As with any good scholarly work, the book’s last chapter focuses on possible future research. Here the authors surprise me. Instead of signing off with your typical “more research is needed in fill-in-the-blank area to save the world,” they warn that future research needs to consider “wisdom in terms of what it can reasonably be expected to do” (p. 208). They actually take time to point out the limitations of researching their favored topic. Refreshing.

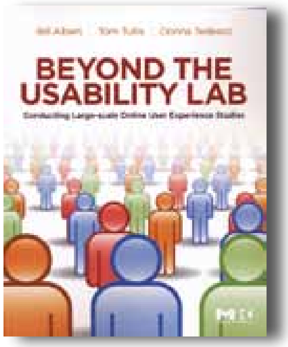
Is this a book that typical technical communicators should order in their next five breaths? Not likely. Is it a book researchers or graduate students should look up during their next stop at the library? Likely.

Gary Hernandez

Gary Hernandez is a communications manager for BP. He received his English literature MA from George Mason University and his technical writing MS from Utah State University. Gary belongs to STC and IABC.

Beyond the Usability Lab: Conducting Large-scale Online User Experience Studies

Bill Albert, Tom Tullis, and Donna Tedesco. 2010. Burlington, MA: Morgan Kaufmann. [ISBN 978-0-12-374892-8. 310 pages, including index. US$49.95 (softcover).]



When I first picked up *Beyond the Usability Lab*, I was excited to read about the large-scale study opportunities it offered. The book’s description talks about getting feedback “from hundreds or even thousands of users.” In my day-to-day work, I am constantly confronted by stakeholders who give validity only to sheer numbers of user data, so if this book can help provide overwhelming evidence of research discoveries, it will be easier to secure the support I need to make necessary changes. However, the large-scale aspects alluded to in the subtitle are secondary to the online aspects. *Beyond the Usability Lab* is written to be a user guide for online studies, and while the topics can definitely be expanded to include more participants than a lab-based study could accommodate, the authors don’t attempt anything as grandiose as the back-cover blurb implies.

Beyond the Usability Lab is intended to help you move your usability testing out of the lab environment and into the online world as a cost-effective way to reach more participants. Albert and colleagues write from their own experience conducting online studies and describe situations when online studies are most and least effective, employing real-world examples with abundant black-and-white screen shots and other graphics. A quest to share knowledge seems to be a driving force behind the book, and I am particularly impressed with how often the authors recommend other, potentially rival texts as references for additional information.

The authors state that they do not intend for online usability studies to replace laboratory studies. They point out that online studies can be extremely useful for unique applications or when data requirements are too large for a traditional lab-based study, but that online studies yield facts and not insight. Instead, they recommend using online studies to verify lab findings or identify issues that require in-depth laboratory testing.

Beyond the Usability Lab doesn't focus as tightly around online usability as I would expect. Usability testing is described at an introductory level with an eye toward use in online and large-group environments. People already acquainted with usability studies will need to dig through large sections of familiar material to find the nuggets regarding online studies. These nuggets are valuable, though, especially if you're familiar only with the more controlled lab environment. The authors' insights, such as how to tell if a participant's unmoderated answers may not be valid, will be beneficial in making sure your first online usability study is a success.

One of the best features of the book is an analysis of four online testing tools on the market: Loop11, RelevantView, UserZoom, and WebEffective. The analysis compares cost, how you would use each tool to create a study and analyze the data, what it looks like to participants, and its strengths and limitations. Also included are screen shots and a checklist of questions to use when selecting a tool for a study. There's also a chapter on how to design and conduct an online study at a reduced cost. This kind of comparison would have helped me make a recent software purchase for my company!

Another useful chapter consists of seven case studies. The studies are provided by guest contributors, further expanding the variety of online study applications discussed and finally introducing subject groups of 100 or more. Unfortunately, each study is written by different authors, and their organization is inconsistent, making direct comparisons difficult.

Other significant topics get their own chapters. A chapter on data analysis and presentation provides more information on presenting data than I'm used to seeing. Presentation is a critical, often sorely overlooked research component that receives the attention it deserves here. If you want to start conducting usability studies right away, the final chapter can serve as a quick-start guide, and you can jump to the end-of-chapter summaries for quick overviews of the major points.

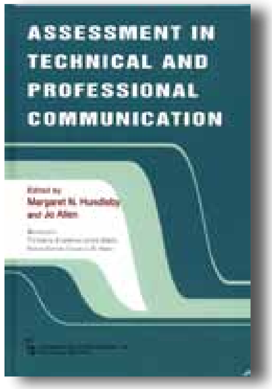
Beyond the Usability Lab also has a companion Web site, www.beyondtheusabilitylab.com, to which you're often referred for support material. Though simple in design, the site is a helpful auxiliary source. However, I was not able to find narrated demos of the reviewed commercial online testing tools as promised in the text. Like the book as a whole, it is useful and well done but promises more than it delivers.

Devor Barton

Devor Barton holds a BA in communications from the University of Houston, and a certificate in project management and an MS in technical communication from the University of Washington. He is a member of STC's Puget Sound Chapter and the Technical Editing SIG and is an ICIA Certified Technology Specialist.

Assessment in Technical and Professional Communication

Margaret N. Hundleby and Jo Allen, eds. 2010. Amityville, NY: Baywood Publishing Company. [ISBN 978-0-89503-379-6. 241 pages, including index. US$56.95.]



Assessment seems to be everywhere. It takes many forms, from performance reviews to grades on pop quizzes. Consumer products are assessed by Web sites, magazines, and television. Even book reviews such as this one evaluate the relevance, accuracy, usefulness, and overall value of books and software for various audiences.

The most discussed assessment in any era usually focuses on the effectiveness of education. U.S. teachers currently have the No Child Left Behind mandates from the federal government that are tied to federal assistance. Teachers must improve test scores to the required levels at the expense of helping students achieve their potential in ways that are often impossible to measure and quantify. Post-secondary schools are not exempt

as legislators battle record budget deficits. Schools in Europe and elsewhere face similar difficulties. As a result, teachers and administrators in technical and professional communication programs are caught up in the assessment movement, which focuses on how to assess and what to do with the results.

Hundleby and Allen have assembled 14 essays meant to help teachers assess their courses and programs. The essays are divided into seven sections, each containing two essays: an extended discussion of a specific aspect of assessment and a "response essay" that expands the discussion. A foreword, an afterword addressing ethical issues, brief biographies of the contributors, and an index complete the book.

The essays approach assessment from various points of view. Some, such as Jo Allen's excellent essay that places the goals and objectives of technical communication programs in the larger context of the university's goals and objectives, present general overviews of the assessment landscape. Others, such as Nancy Coppola and Norbert Elliot's, address specific assessment situations in specific schools and detail their methodology and results. In sum, the essays present both a general overview of assessment and specific applications of assessment to undergraduate programs, graduate programs, and service courses. Their broad range of perspectives can help you decide how to assess your program or course.

The concern is to describe where assessment is a valuable administrative tool. You won't find practical and specific applications of assessment techniques, such as point systems versus holistic grading systems for specific assignments. However, you'll find material on quantitative methods of assessing programs and courses that you can adapt to your specific situation.

One sticking point of assessment has always been establishing criteria. As Gerald Savage asks in his response to an essay about relational models in assessment, "How are the competencies of scholars, students, and practitioners in the field assessed?" (p. 166). For example, do administrators adopt criteria based on industrial, business, or government criteria used in performance assessments? Or do they turn to national organizations such as STC or the National Council of Teachers of English for guidance in developing criteria for assessing their programs? STC is now building what the association identifies as a body of knowledge. Will that form the basis for assessment criteria? Or will program and course directors turn to standardized testing (such as DANTES Subject Standardized Test of Technical Writing—discussed by Norbert Elliot)?

Or maybe a better approach is the one found in the criteria from the Accreditation Board of Engineering and Technology (ABET) on communication? U.S. engineering programs have for years been assessed by ABET criteria. The collection includes Michael Carter's essay on how technical communication can aid the engineering programs being assessed by ABET.

A second problem in assessment is what to do with the results. Chris Anson presents two case studies of how assessment can be used to modify how writing is taught. Both cases are of academic departments concerned about how their students are writing. One department houses a technical communication program (English) and the second houses chemical engineering. Anson shows how assessment leads to modifications in how the students learn to write. With this approach, he sets the tone for the essays to follow: Assess in a variety of ways, but apply the results to enhance student learning.

The anthology includes an essay on assessing a graduate program. Coppola and Elliot describe an empirical study and the subsequent report of a technical communication graduate program at the New Jersey Institute of Technology. What is interesting is that this graduate program is 100% online, thus giving those who teach online courses insights into how they can be assessed.

Jeffrey Jablonski and Ed Nagelhout offer another model for evaluating instruction. They wanted to know how their students were reacting to their course Web site, so they brought in a consultant to do usability studies of the site and conduct focus groups with the instructors. In his response, William Hart-Davidson broadens the issue to the question of lifelong learning and the role technology plays in the continuing instruction offered graduates.

Doreen Starke-Meyerring and Deborah Andrews address an issue that could have relevance in nonacademic settings: evaluating virtual teams in a cross-cultural environment. Most assessment techniques and methods are aimed at traditional approaches that exclude cross-cultural situations. The authors describe a partnership for a business communication course offered at McGill University in Canada and the University of Delaware. Although the teams were to

address problems identified in specific businesses, the real focus was on developing a shared culture in which effective communication leads to documents that solve specific problems.

Sam Dragga's afterword describes the ethical situation in developing assessment tools and methods in a general rather than a specific sense. Still, his description of ethical situations does reinforce the point that you should be ethical when you assess.

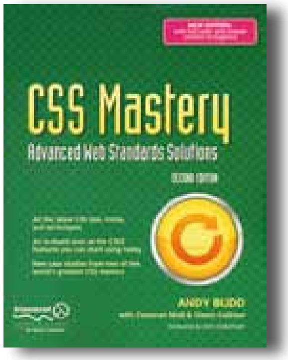
A word of warning to those not used to academic prose: This group of essays is written by academics for academics using a style and language that non-academics will find maddening and infuriatingly complex.

So if you are an academic charged with assessing your technical communication course or program, the collection offers you considerable detail on how to do this assessment and what to do with the results. Training personnel in business, industry, and government could find suggestions for evaluating their training programs in technical communication in the collection but would have to overcome the problem of the academic style. For them, it might be a good book to have in the company library; for technical communication program administrators, the collection is a necessity.

Tom Warren
Tom Warren is an STC Fellow, a winner of the Jay R. Gould Award for teaching excellence, and professor emeritus of English (technical writing) at Oklahoma State University, where he established the BA, MA, and PhD technical writing programs. Past president of INTECOM, he serves as guest professor at the University of Paderborn, Germany.

CSS Mastery: Advanced Web Standards Solutions

Andy Budd, Simon Collison, and Cameron Moll. 2009. 2nd ed. New York, NY: Friends of ED. [ISBN 978-1-4302-2397-9. 362 pages, including index. US$39.99 (softcover).]



It's 2010, about 12 years since the Web standards movement began. If you're serious about designing or developing for the Web, you strive for standards-based code, not only to make your designs more sustainable but also to increase your client's bottom line. That's why *CSS Mastery* stresses the importance of semantic, well-structured Hypertext Markup Language (HTML) to provide good hooks for your Cascading Style Sheets (CSS). Andy Budd clears up any misconceptions about divs and spans, discusses what semantics means in regard to naming conventions, and explains how to determine which DOCTYPE you should use.

The first edition of the book was well received by the design community, and Budd, an industry-recognized designer, has maintained good form. The second edition is 100 pages longer, and the additional discussion is all timely, relevant, and insightful.

The early chapters solidly introduce the fundamentals. You learn how to avoid hours of frustration by using the syntax of more complex CSS selectors. With plain language and well-documented code examples, Budd explains how the cascade works and how to use different selector techniques to target and style even the most specific elements in your code. You learn about child and adjacent sibling selectors, the cleverness of pseudo selectors (especially the :last-child selector), and the power of attribute selectors.

No Web designer can push pixels efficiently without clearly understanding the box model, which Budd concisely recaps with helpful diagrams. You also get discussion of positioning, floating, and clearing, which are essential techniques if you're laying out complex, elegant designs. Budd's readable explanations teach in detail the finer points of CSS craftsmanship, such as drop shadows, image replacement, opacity and RGBa,

rounded corners, sprites, and faux columns. If you haven't heard of these techniques, rejoice, because they will save you hours of hassle in Photoshop.

As great as Web standards are, we all still have to deal with the legacy of the browser wars, namely Microsoft Internet Explorer's proprietary code that necessitates nonstandard conditional comments such as <!--[if !IE]>-->. Budd dedicates an entire chapter to the most common bugs and their fixes. With seasoned expertise, he explains the usefulness of hacks and filters and then explains why you'll be better off in the long run understanding how to isolate bugs rather than relying on the "black magic" of hacks.

The second edition, like the first, features case studies by masters Simon Collison and Ethan Marcotte. Their practical chapters apply the advanced concepts you've learned, including ways of using CSS3 to progressively enhance your designs in Webkit and Mozilla browsers.

The creativity of this book will help you grow as a visual designer and begin thinking about the most effective and clever ways CSS can turn your inspired designs into stuff worthy of a Webbie.

Stewart McCoy
Stewart McCoy is a user experience design intern at Viget Labs in Washington, DC. He studied rhetoric and professional communication at Iowa State University. He maintains a portfolio and blog at stewartmccoy.com.

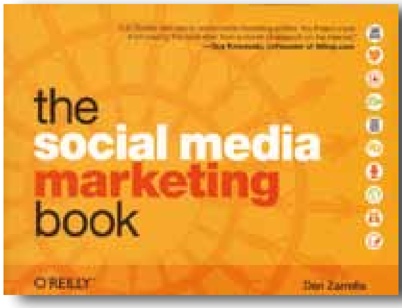
The Social Media Marketing Book

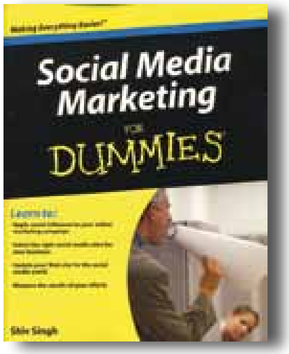
Dan Zarrella. 2010. Sebastopol, CA: O'Reilly. [ISBN 978-0-596-80660-6. 233 pages, including index. US$19.99 (softcover).]

Social Media Marketing For Dummies

Shiv Singh. 2010. Hoboken, NJ: Wiley. [ISBN 978-0-470-28934-1. 272 pages, including index. US$24.99 (softcover).]

By now everyone knows the importance of social media like Facebook and Twitter, but many don't know how to use the technologies to market products or services. These two books offer differing approaches to help you reach out to new markets.





Zarrella focuses on the technology: Which social media marketing tools are best for you? Topics range from blogging to social networking to virtual worlds. Zarrella looks at several technology types, like "Social News," and then explains the major Web sites in this type, like Digg and Linkerati.

Read Zarrella if you need to know the best practices for various technologies. No idea what a tweet is? Why hash tags are important in the Twitter universe? How you can use Flickr or YouTube in your marketing endeavors?

Zarrella is more interested in teaching you about technologies, their histories, current uses, and standard online practices so you don't create a marketing or PR disaster. An early Facebook user created a fan page for Coke that received over 250,000 fans in the first few weeks it was online. Facebook asked the Coca-Cola Company to take over the site, but the marketing team at Coke realized doing so would create a PR nightmare. Instead, they let the user keep the page and offered marketing resources to manage the content.

Unfortunately for some, Zarrella assumes you've already decided to use social media for your business. You're left to determine which tool or technology you need. If you have limited resources, do you focus them on YouTube or Twitter? Second Life or Blogger? How do you know if these tools are working for you? If you're unsure, read the Dummies book.

Singh focuses more on marketing and market research. He argues for using social media to help you convince your dinosaur marketing team that the future really is online and it isn't all that different from the marketing you're used to doing. For example, he compares social influence marketing (SIM) with traditional marketing, like direct mail, display advertising, and PR.

While he does mention some technologies, he focuses more broadly on what it means to market online and on mobile devices. He begins by defining SIM and the types of influencers typically found in online communities. The book defines specific demographics for various technologies. For example, you'll find that the largest demographic on YouTube is 18- to 34-year-olds. If you need to quantify your markets, Singh gives you the numbers. For example, many might not know that ning.com has the same number of users on average as LinkedIn or that 38% of ning users are between 35 and 49 years old.

Also, Singh tells you how to start a SIM campaign. Where should you market and why? What has worked for other businesses? What are the rules in this new environment? What are the best practices and the common mistakes? When you take your company's marketing online, how should you develop your voice? Why might it differ from the one you're used to using in, say, TV advertising?

The strength of this book is that it helps you assess your work. How do you know you've hit the right market? How can you track your successes? Where should you target your advertising? If you live by metrics, this is definitely the book you need.

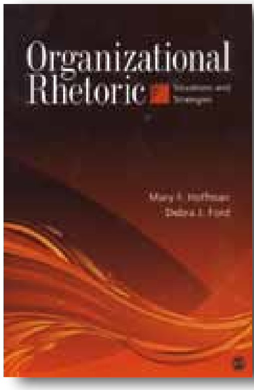
Singh writes to professional marketers working for medium to large companies, and his book covers what some might call the "science" of marketing in an easy-to-read style. Zarrella, on the other hand, doesn't care if you're a mom-and-pop shop or a major corporation; he's out to tell you what the tools are and how they work. In the end, you might find yourself needing both books.

Kelly A. Harrison

Kelly A. Harrison works as a consultant, speaker, and writing instructor in San José, CA. For over 15 years, she has written technical materials and online content for various software companies. Currently, she teaches writing at San José State University and prefers short-term and part-time contracts.

Organizational Rhetoric: Situations and Strategies

Mary F. Hoffman and Debra J. Ford. 2010. Thousand Oaks, CA: Sage Publications. [ISBN 978-0-4129-5669-7. 267 pages, including index. US$41.95 (softcover).]



"*Organizational rhetoric* [OR] is the strategic use of symbols by organizations to influence the thoughts, feelings, and behaviors of audiences" (p. 2). In *Organizational Rhetoric: Situations and Strategies*, you learn the role that rhetoric plays in an organization's contemporary culture; how it identifies rhetorical strategies, addresses critical approaches related to issues and risks, and evaluates and critiques OR; and its methods of creating and maintaining its identity for audiences.

OR characteristics involve speaker, situation, audience, and message. The speaker (persona) speaks for the entire organization. The situation relies on knowing what is happening around the organization, monitoring its environmental impact, and responding appropriately. Audience ensures that organizations deliver the right messages to the right people based on their concerns and opinions of the organization.

Organizational communication cannot be neutral. Someone is always the voice of the organization, telling everyone the choice(s) they must follow. Hoffman and Ford say, "Not all voices have equal access for presenting their interests" (p. 83). The power in organizational communication is built on the "basic forms of perception and social reality . . . through language choices and communication processes" (p. 86).

Organizational identity (OI) defines the organization's central character, its claimed distinctiveness from its competitors, and consistency of its character in how the organization spends its money and efforts in its identity. Building a positive image requires showing how the organization meets its target market's needs compared to its competitors, treats its employees, and brands its products. Technical communicators can help build OI by being familiar

with the organization's target market and preparing communications that elicit a positive image.

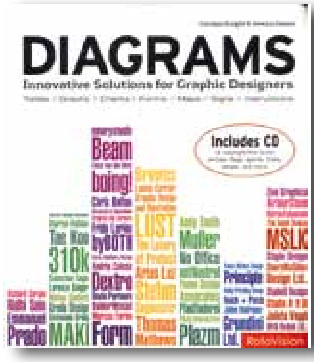
Along with OI comes strategic resolution. Building a positive image requires delivering messages "in print, television, Web site, and radio advertisements; congressional and other types of testimony; public meetings; cooperation sessions; lobbying; newsletters; press releases; public affairs programming; billboards; legislative position papers; special events; and speeches" (p. 152). Communicating with congressional and regulatory audiences requires using logical arguments and evidence, while communicating with public audiences requires appealing to their values, credibility, and identity. Resolving strategic crises with OR relies on the use of instructional, apologia, and differentiation strategies.

The main point from *Organizational Rhetoric* related to organizational communication is that the technical communication profession has a distinct way of writing corporate communications that use the main OR characteristics—speaker, situation, audience, and message—in a simple, concise manner. Communication professionals like us have the skills for writing policies and procedures, knowing about regulatory compliance, and portraying an organization in the best manner possible when it encounters political, environmental, or societal issues.

Jackie Damrau
Jackie Damrau has more than 20 years of technical communication experience. She is a Fellow and member of the STC Lone Star community and the Instructional Design & Learning SIG, and manager of the International Competition. She enjoys reading philosophy and psychology and spending time with her grandson.

Diagrams: Innovative Solutions for Graphic Designers

Carolyn Knight and Jessica Glaser. 2009. Mies, Switzerland: Rotovison. [ISBN 978-2-88893-061-7. 223 pages, including index and CD-ROM. US$40.00 (softcover).]



Knight and Glaser present a visual buffet by the world's designers to stimulate your creative juices. In this high-quality, colorful book, printed on thick and luscious paper, they mostly succeed.

Several excellent diagrams combine both visual interest and successful communication. A Nike ad cleverly compares the features of different shoes. Maps of England and attendees at cultural events attractively and clearly present variations in cultural investment and interest, respectively, by region; other maps clearly and elegantly help you discover where you are and where you're going. Peter Grundy provides superb infographics that make data accessible while remaining playfully and visually interesting. A board game lets the public playfully offer their opinions on how to design future Olympic facilities, and "radiation" diagrams dramatize the unpleasant side effects of pig farming.

Two faulty assumptions, however, weaken the book. The authors consider text boringly ineffective: "[Diagrams are] not only more easily understood, but are also more interesting and enjoyable to read than text alone." Say what? Further, they use the assumption that designers "can generally rely on readers *wanting* to understand the information being presented to them" (p. 4) to justify complex designs. These assumptions lead to three flaws.

First, most technical communicators know that few audiences will accept complexity; they want messages delivered quickly and efficiently. This misunderstanding of audiences informs poor design choices such as using minuscule sans serif type even where there's plenty of room for more readable text, and reproducing many images too small for the details to be comprehensible. (Many are not in English, exacerbating the comprehension problem.)

Second, the book generally fails to discuss design principles, objectives, and how to reconcile them to meet audiences' needs. As a result, it won't teach you how to analyze graphics problems, identify the visual challenges that arise from audience characteristics, or bridge the gap between designer and audience.

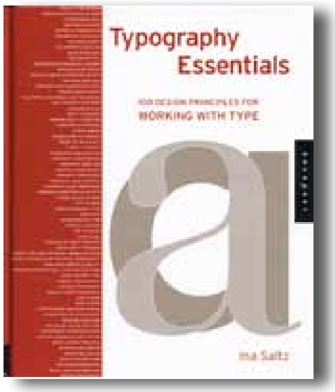
The third flaw is that the authors relied on submissions from designers rather than seeking out excellent diagrams that illustrate key visual communication strategies. This means you won't (for example) see three excellent maps presented side by side to compare and contrast and reveal what works. You won't find contributions by luminaries such as Edward Tufte, Richard Saul Wurman, or John McWade—designers who understand both aesthetics and the need to acknowledge their audience.

If you're seeking a coffee table book with a breadth of innovative graphical thought, *Diagrams* is a good choice. But if you want someone to teach you how to create effective diagrams and how to seek a balance between visuals that will be gazed at and visuals that will be used, McWade's *Before and After* (Peachpit Press, 2005; reviewed in the May 2006 issue of *Technical Communication*) is a superior choice.

Geoff Hart
Geoff Hart is an STC Fellow and information designer who can draw a straight line with a ruler on a good day, but who nonetheless has an avid interest in graphic design theory.

Typography Essentials: 100 Design Principles for Working with Type

Ina Saltz. 2009. Beverly, MA: Rockport Publishers. [ISBN 978-1-59253-523-1. 208 pages, including index. US$40.00.]



When the opportunity to review Ina Saltz's *Typography Essentials* arose, I was delighted. My enthusiasm did flag when I first saw its very plain cover listing much of the table of contents in all-capped 8-point text. But when I returned to the book, I found it a treasure trove of essential information that gave me the inspiration I was seeking for a rebranding project.

Saltz—an art director, designer, author, photographer, and professor whose expertise encompasses typography and magazine design—provides 205 pages of must-read principles about type with beautifully rendered supporting images. Not only does she provide rules, she notes when you could bend or break them. This can be more important than the rule itself.

Perhaps surprising is that you won't find a plethora of text. The book exemplifies the saying "A picture is worth a thousand words." One or two eloquent and succinct paragraphs describe each rule. Saltz gets out of the way to let spot-on samples do the talking. The most beautiful gems of information are revealed in the project captions describing the artwork.

Saltz moves logically from the letter to the word to the paragraph and ultimately to the page as she presents 25 principles for each category. I found my knowledge reinforced in some areas and stretched in others. The book came to life for me in a way that epitomized Robert Bringhurst's prefatory quotation: "One of the principles of durable typography is always legibility; another is something more than legibility: some earned or unearned interest that gives its living energy to the page. It takes various forms and goes by various names, including serenity, liveliness, laughter, grace and joy" (p. 4).

Compelling artwork shows how letters can effortlessly evoke strong feelings. And while I don't agree with Saltz's recommendation to break all the rules (she feels every typeface meets a need), I do appreciate her guidance in bending rules to take the work to the next level. For example, she shows how bent rules contribute to effective design by encouraging designers to deliberately employ shape to marry text with purpose.

Had I judged the book only by its cover, I would have overlooked its value and missed the great conversations it sparked between people in my organization. I'd still be seeking inspiration for that project and would not have heard a client say, "We always love your designs, but this issue simply comes to life!"

I encourage anyone who deals with typography to digest the text, the project descriptions, and the outstanding visual examples. I'm confident you'll discover behind the underwhelming cover content that

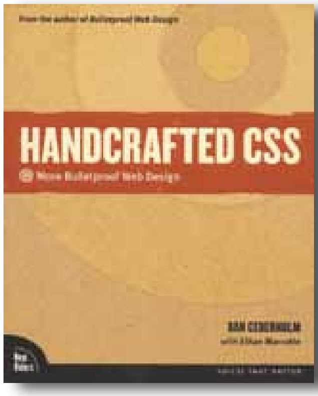
will warrant annotation and will change your use of typography in a way that will bring elements of serenity, laughter, grace, and joy to your work.

Louellen S. Coker

Louellen S. Coker has more than 15 years of experience in public relations, instructional design, Web design, technical writing, and editing. With a technical communication MA, she is president of Content Solutions, an STC senior member, and a past Lone Star Community president. She has taught technical communication and presented workshops.

Handcrafted CSS: More Bulletproof Web Design

Dan Cederholm, with Ethan Marcotte. 2010. Berkeley, CA: New Riders. [ISBN 978-0-321-64338-4. 217 pages, including index and bibliography. US$39.99 (softcover).]



This is Dan Cederholm's second book about bulletproof Web design. The first was about standard style sheets and Extensible Hypertext Markup Language (XHTML). This new book focuses on more personalized style sheets as an aid to Web design. If you want to become more efficient at creating Web pages that use clean styles and adapt to different browsers and you're familiar with the basics of Cascading Style Sheets (CSS), Hypertext Markup Language (HTML), and Web standards, this book will steer you in the right direction.

Cederholm takes you on a journey, following a fictional case study of the Tugboat Coffee Company. He wants you to travel into the mindset of a craftsman, to learn how to manipulate the HTML as though carving an intricate piece of art or using inspiration to create something unique. In preparation for the passage, Cederholm stresses flexibility and planning: CSS offers the flexibility and you provide the planning.

Almost every page has graphic examples of what you can accomplish with CSS. Some illustrate the end results of specific CSS directions, often in sequence so you can see the progression; some show various options; while others demonstrate what happens if CSS is not applied appropriately. When applicable, you learn how the results appear in different browsers and how to adapt to each browser's idiosyncrasies.

To work your way through Cederholm's logically prepared road map and get the most out of his instructions, start from the beginning of the book (hint: don't skip the introduction, because it offers insights into how the book is designed and into the craftsman mindset). The instructions and explanations walk you through several aspects of a Web site, from something as simple as adjusting text size and as complex as building a fluid grid system.

The fluid grid system is covered in a chapter contributed by Ethan Marcotte, a respected Web designer and developer in his own right. Marcotte and Cederholm have similar writing styles, combining clear instructional content with a sense of humor, so there is no disruption as you move through the chapters.

The book is relatively thin for a reference book, but it is certainly not lightweight. Although it doesn't cover innumerable situations you might encounter when creating a Web site, it is extensive enough to furnish the basics and to inspire you to develop innovative solutions and projects for your own work.

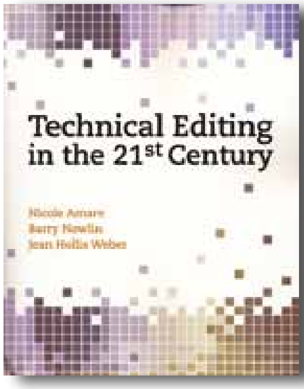
If you want to experiment with personalized CSS and learn how it can improve Web design, be flexible enough for different browsers, and clean up your HTML, take the time to read *Handcrafted CSS.* It will be time well spent. The book is well written, nicely laid out, and easy to peruse.

Sherry Shadday

Sherry Shadday works for Southwest Research Institute as a principal instructional specialist creating print, stand-up, and Web-based training in Layton, UT. An STC member, she received a technical communication master's degree from Utah State University and previously served 21 years in the U.S. Air Force, maintaining aircraft electrical systems.

Technical Editing in the 21st Century

Nicole Amare, Barry Nowlin, and Jean Hollis Weber. 2011. Upper Saddle River, NJ: Prentice Hall. [ISBN 978-0-13-119677-3. 458 pages, including index. US$93.40 (softcover).]



Technical Editing in the 21st Century is intended to be a university textbook that is also applicable to new practicing editors and technical writers and to experienced editors seeking a review of editing basics. The book seems suitable primarily to undergraduate students being introduced to the field of technical editing. Its planned use as a textbook is supported by the clarity of the writing and the repetitiveness of the organization of the chapters.

Exercises throughout the chapters confirm the intended audience. Students should benefit from the practice of principles and techniques offered by the exercises. Instructors may download supplementary materials from the publisher's Web site. Practicing editors will not be able to obtain those materials.

Broad coverage of editing online content gives the book a contemporary focus. Four of the book's 24 chapters immerse readers in Web-related editing issues and the necessity for competence with pertinent editing tools. This focus is complemented by chapter-length coverage of standard editing topics such as grammar, spelling, and punctuation; the levels of edit; style; style guides; usability testing; and production and project management. Other traditional topics covered are ethical, legal, global, and cultural issues; document design; and graphics.

Some chapters present just highlights of the topics; other chapters go into greater detail. The varying levels of depth seem appropriate for an audience that is beginning to explore editing as a career. For instance, the modest last chapter, "Technical Editing Careers," touches lightly on subjects as varied as job descriptions in want ads, emotional intelligence, the average number of words per hour that experienced practitioners typically edit, and the Myers-Briggs personality type indicator categories. I would have appreciated a comment on which of those indicators characterize successful editors.

Balancing the topic coverage in the 24 chapters is a strong bibliography populated by key authors and landmark publications. An example is five works by usability expert Jakob Nielsen and various coauthors, which complement the chapter "Usability Testing on a Budget."

The pattern of topic coverage in the usability chapter represents the pattern found in other chapters. It starts with a set of expected student learning outcomes. They are followed by an overview and an extended definition of usability testing. The chapter then explores considerations and stages of usability testing. Several figures, primarily tables, strengthen the narrative. (In other chapters, figures can be numerous and sometimes consist of drawings, photographs, and sample documents.) The chapter also includes tips, one of which is representative of some tips in other chapters: The usability tip recommends the Web site of a respected authority. In this instance, the authority is the "Usability and User Experience" special interest group (SIG) of the Society for Technical Communication. The usability chapter concludes with three exercises and a brief chapter summary. Other chapters contain a larger number of exercises and of tips regarding ways that technical editors can use chapter information in practice.

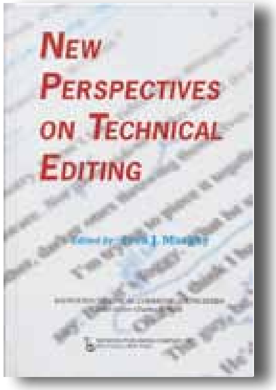
As an alternative to technical editing textbooks that presently dominate the field, *Technical Editing in the 21st Century* deserves a try. The book provides ample material for a semester's worth of activities. Instructors without practitioner experience will be comforted to know that one of the authors is a longtime editor and the other two are university instructors.

Ann Jennings

Ann Jennings, PhD, is professor of English at the University of Houston-Downtown, where one of her specialty courses is technical editing. As a freelance editor, she focuses on forensic psychiatry. She is STC's 2009 winner of the Jay R. Gould Award for Excellence in Teaching Technical Communication.

New Perspectives on Technical Editing

Avon J. Murphy, ed. 2010. Amityville, NY: Baywood. [978-0-89503-394-9. 210 pages, including index. US$47.95.]



In the relatively small world of technical editors, some of us are neophytes, some are emerging editors, and some are the old guard. All of us will find stimulation and information in *New Perspectives on Technical Editing*. This anthology effectively defines the canon of the field in the early 21st century. The editor and the authors are acknowledged experts in their niches.

The instructors and upper-level and graduate students who comprise a portion of the book's intended audience are advised to become thoroughly familiar with these luminaries. The other members of the book's intended audience, "researchers and practicing editors" (p. 2), will recognize the authors.

Readers may have difficulty choosing a starting place. If the choice is the chapters by Angela Eaton and George Hayhoe, readers will discover both announced and implied messages. In "Conducting Research in Technical Editing" (Chapter 2), Eaton surveys the state of research in the field and encourages readers to conduct a high quality and quantity of new research. This is the announced subject of her chapter. The welcome and useful surprise is Eaton's definitions and examples of research methods suited to technical editing. This information speedily schools readers in what may be unfamiliar terminology.

Hayhoe's "Editing a Technical Journal" (Chapter 9) offers a fascinating look at the ways a journal editor works. What aspiring journal editor would not be charmed to learn of the 17th-century roots of the field? What teacher of technical editing could bypass the helpful table that defines the duties of 13 categories of editorial and production staff? What aspiring editor would skip the sections on the operation of a journal and on the philosophy that determines whether an editor serves as a "gatekeeper" of the quality of "a discipline's body of knowledge" (p. 165) or as the far different mentor to authors? And what submitting author could ignore the hidden message in Hayhoe's chapter that knowing how a professional journal is edited and produced can help authors comprehend the time and effort involved in initial and second reviews, rewrites, acceptances and rejections, and related matters? This chapter should be required reading for inexperienced authors, including second-language authors. It would help them, for example, if they have a strict personal deadline, such as a date for assembling a tenure portfolio of published articles.

Thomas Warren's "History and Trends" (Chapter 3) will appeal to readers interested in a detailed account of the evolution of technical editing from the 16th through 21st centuries. Although other chapters mention a dearth of research in the field, Warren notes plenty, some of it anecdotal. Of particular interest is his discussion of the influence on technical editing of research in communication theory and cognitive psychology and of the reader-centered approach to technical writing.

For those who teach technical editing, Carolyn Rude's "The Teaching of Technical Editing" (Chapter 4) is especially interesting. It comments on the potential and limitations of courses in technical editing, and it answers numerous questions. How should the course be organized? Should students learn copyediting before comprehensive editing? How much attention should be given to the basics such as grammar, spelling, and punctuation? What types of assignments are useful? How do technology and client needs affect the tools and practices that students should learn? In short, what principles and techniques should instructors develop or adopt if they hope to prepare students to function as 21st-century editors?

Jean Hollis Weber's "Copyediting and Beyond" (Chapter 6) begins with a primer of useful definitions that cover the levels of edit, such as proofreading and developmental editing. Instructors, students, and aspiring editors should scrutinize these definitions. Weber focuses on the copyeditor. While that role may be considered a relatively low one in the levels of an editing career (p. 88), it is often the only editorial role acknowledged by authors and employers (see Chapter 5, p. 68). Weber believes that a copyeditor can edit at all levels. She provides sound advice on grammar rules, and she offers approaches to editing online content, working with writers, and making the best use of electronic tools for editing text and graphics.

Barbara Gastel's "Editing the Pure Sciences" (Chapter 8) points to the opportunities that abound for research in this field. The chapter also covers issues particular to science editing, including the variety of institutions and agencies that provide employment for science and medical editors, specialized style manuals and standards, university-level training, ethical issues, and certification offered by the Board of Editors in the Life Sciences (BELS). The chapter concludes with an extensive bibliography.

Michelle Corbin's "The Editor within the Modern Organization" (Chapter 5) covers the typical working arrangements for an editor "across…a division… within a development department… [or] within a department of editors" (p. 71). Corbin describes the standard career track for a technical editor within an organization and comments on the hard and soft skills needed. She also explores emerging conditions: single-sourced information and the Extensible Markup Language (XML) strategies that make modular documents possible; agile development techniques; and collaborative environments, such as wikis, in which the editor may also serve as an information architect.

Placing technical editing squarely in the 21st century, Geoffrey J. S. Hart's "The Editor and the Electronic Word: Onscreen Editing as a Tool for Efficiency and Communication with Authors" (Chapter 7) contrasts the several benefits of editing on paper to the faster-paced results of editing online. Hart offers an extensive list of the brand-name tools for word processing, desktop publishing, online authoring, single sourcing, and multimedia publication. He notes the confusion that results when authors and editors use different versions of the same software. Hart discusses online research tools of value to editors and describes essential hard and soft skills.

Finally, the "Annotated Bibliography" (Chapter 10) by Murphy and Warren is a comprehensive list of 100 major works in the field of technical editing. The list is divided usefully into sections. Of particular interest are "Tools," which lists major dictionaries and style guides; and "Specific Areas," which offers resources pertinent to editing issues in science, the social sciences, statistics, and visual media.

Ann Jennings

A Project Guide to UX Design: For User Experience Designers in the Field or in the Making

Russ Unger and Carolyn Chandler. 2009. Berkeley, CA: New Riders. [ISBN 978-0-321-60737-9. 267 pages, including index. US$34.99 (softcover).]

Web design has become a diversified field over the past 10 years. Whether you are working freelance, for a consultancy, on in-house, as the Web has become more integral to core business plans, Web teams have grown and become more specialized. The role of user experience (UX) designer has become more prominent in recent years, and some people still have difficulty getting their head around the discipline. UX as it relates to the Web is about creating useful and usable Web sites and applications, according to Russ Unger and Carolyn Chandler, coauthors of *A Project Guide to UX Design*

The authors have taken a very pragmatic approach to defining UX, positioning it within the Web design industry as they explain the details of UX project processes and deliverables. Unger is a member of the board of directors for the Information Architecture Institute and recent addition to the team at Happy Cog, a premiere Web design consultancy. Chandler is design director for the interactive agency Manifest Digital and an active leader within the Interaction Design Association.

In a way, the book is a milestone for UX. It's the first to take a look at UX as a unique discipline and field of practice. Unger and Chandler not only define, differentiate, and position UX within the Web industry, but also explain in brief the different roles a UX designer and other team members might play during the course of a project—roles such as information architect, interaction designer, user researcher, brand strategist, visual designer, and content strategist.

The selling point of this book is that it is for UX designers *in the field or in the making*. Unger and Chandler offer up their industry insight and provide you with communication strategies to develop successful

engagement strategies, cross-team communication, stakeholder communication, project proposals, and project launches. Not only will they help you develop your vocabulary and your understanding of UX in the context of the current Web industry, but they provide you with the tools to get you started as a successful professional or help you refine your project methodology.

The text itself is very well structured and edited, and each chapter is concise and on topic. You can read the book through front to back cover in about two three-hour sittings, or read each chapter by topic, which you will often do as you are redefining yourself as a UX professional. Topics addressed include

- Solidifying project objectives
- Defining business requirements
- Conducting user research
- Developing personas
- Understanding search engine optimization and the technology behind Web business
- Transitioning from design to development
- Wireframing and prototyping
- Usability testing
- Addressing post-launch concerns

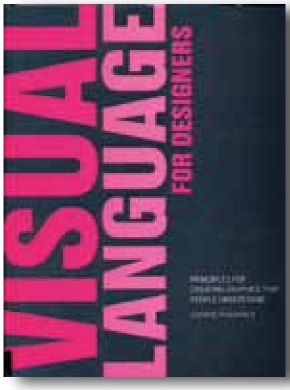
The chapters on site maps and task flows and on wireframes and annotations are particularly helpful, as you will see how leading industry professionals handle these project deliverables. The book includes detailed visual examples that break down these deliverables into manageable components and clearly explains the purpose and process of each. In the chapter that addresses site maps, you will learn what a site map is, how it fits into the context of a project, the tools used to develop site maps, the key elements of a site map, and common mistakes and best practices for producing site maps.

Unger and Chandler remind us that UX is iterative. Each project should be the springboard for another project. You evaluate your research data and then can draft another proposal detailing recommendations on how a project can be improved upon. User experience is about improving peoples' interactions and perceptions of a product, system, or service, and there is always room for improvement.

Stewart McCoy

Visual Language for Designers: Principles for Creating Graphics That People Understand

Connie Malamed. 2009. Beverly, MA: Rockport Publishers.
[ISBN 978-1-59253-515-6. 240 pages. US$40.00.]



Visual Language for Designers by Connie Malamed is a bonus book. It explains how we acquire information from visuals and then presents the principles to design them, accompanied by examples of compelling graphics from around the world. The bonus? It looks wonderful on your coffee table, not tucked away on your professional bookshelf.

The section "Getting Graphics" explains the human information-processing system and how visuals help viewers "get" information from perception to short-term and then to long-term memory. Malamed \ explains the challenge of reducing cognitive load when designing graphics.

The bulk of the book presents six principles to follow when creating graphics. Malamed refers to these as catalysts to inspire the audience. The first three principles concern arranging visual components on a page. "Organize for perception" targets techniques to gain viewers' attention, such as using color and texture to make items stand out. Grouping visual elements is another technique that enables viewers to find information more quickly.

The principle "Direct the eye" improves processing and increases comprehension. Malamed shows ways to emphasize objects, including movement, visual cues such as arrows, color, and captions to direct the viewer to a focal point.

Many discussions I've had about graphics include "do we use photos or not?" "Reduce realism" answers the question. The author says that a photo with too much reality can distract from the key message. Ways to make the images less realistic include using icons and line art.

Two principles concern how to construct information graphics to display data and relationships. You can "Make the abstract concrete" by using diagrams,

charts, graphs, visualizations, maps, and timelines. Malamed explains that abstract graphics have their own "unique notation or visual code" (p. 136), which can depict intricate relationships, reduce cognitive load, and improve search efficiency.

Describing how to "Clarify complexity," Malamed shows how visual explanations work, such as detailed diagrams of body parts. Other techniques include magnification, exploded views, and implied motion to convey in-depth information.

Finally, you learn how to "Charge it up" by including elements in graphics, especially posters, that involve people emotionally and move them to action. Malamed's explanation of how abstract graphics work, especially in relation to principles of perception, is the most useful section for technical communicators.

Rockport books are usually beautifully laid out, and this is the case here. The condensed images of large graphics are great for introducing concepts and processes. Some of the illustrations, though, are so small it's hard to extract helpful details. Good thing Malamed includes detailed lists of sources and contributors, should you want that information.

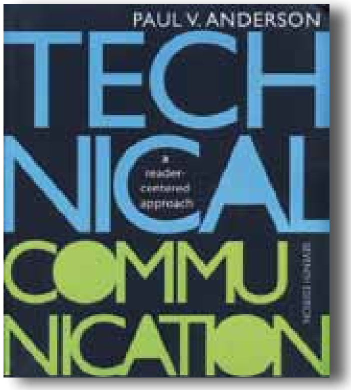
This is a worthwhile book, especially for illustrators and graphic designers. The principles are equally applicable to designing Web sites and user documentation on paper. It's also worth looking at Malamed's Web site (www.malamedconsulting.com) to find out more about her work and link to her two blogs.

Beth Lisberg Najberg

Beth Lisberg Najberg is an information designer based in Chicago and principal of Beginnings. She incorporates graphics and job aids as she develops technical training for frontline workers so that procedures, processes, and concepts are easy to follow. She also consults on visual communication in business.

Technical Communication: A Reader-Centered Approach

Paul V. Anderson. 2010. 7th ed. Boston, MA: Wadsworth Cengage Learning. [ISBN 978-1-4282-6393-2. 726 pages, including index. US$128.95 (softcover).]



I have used this textbook for an upper-level college class on professional writing—a mix between technical and business writing—since 2005. That I have continued to use it is a tribute to its quality as a textbook and to the conservative nature of teaching. Nobody likes to redo a syllabus, class plans, and lecture notes. But every few years a new edition comes out, a collusion between an author's desire to keep up-to-date and the publisher's need to stay competitive. So a professor has to decide whether to stay on board or jump ship.

With Anderson's 7th edition, I've decided to stay on board, but not without some questions as to why a new edition was necessary. *Technical Communication*'s strength continues to be its stress on usability and persuasiveness. Anderson always has the reader in mind and constantly emphasizes that point.

Two new chapters attempt to fill some holes in previous editions and address issues brought on by the developments of new technology and globalism. In the first, "Analyzing Information and Thinking Critically," Anderson does a fine job of relating the steps in research to the sections of an empirical research report: Introduction, Method, Results, Discussion, Conclusion, and Recommendations. I find this helpful not only because it parallels the format I employ in my day job as a technical writer, but also because it is what Anderson uses later in his superstructure for reports. What I have always liked about *Technical Communication* is its projects, and reports are one of the projects.

The second new chapter, "Communicating and Collaborating in the Globally Networked World," updates the textbook by including discussions of instant messaging, blogs, cloud computing, desktop sharing, and virtual meetings. While I'm glad Anderson is

keeping up-to-date, it might help to include critical discussions of these new modes of communicating. For example, the Documentation Department at my company has consciously chosen not to use instant messaging because it prevents us from concentrating and provides no written record of a discussion, unless you save as it a file, which is a cumbersome process.

Other features of the new edition include “Try This” features, which encourage students to try out what they are reading about, and “Guiding You” process sections, which connect the first 16 chapters of the textbook to the writing projects of proposals, reports, and instructions. One new section shows students how to create Web sites using nothing but Microsoft Word, which will be helpful for those who choose to make a Web site for a writing project.

I am somewhat ambivalent about the publishing process that requires such frequent updates to textbooks. I hear more complaints from students who cannot resell their textbooks than justifications from the publishers. But I’m enough of a Luddite to appreciate that we still have books and haven’t gone completely digital.

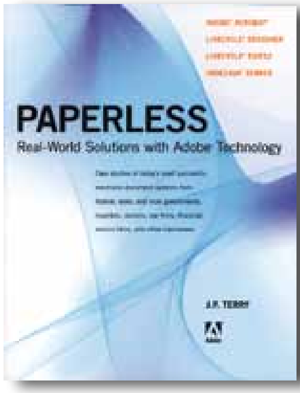
I would have liked to evaluate the corresponding instructor’s Web site for this textbook, but as of this writing it had not gone online for the new edition. I have used other text-based Web sites and found them useful, especially for developing a new course or for preparing a new class on short notice.

I’m thankful that Professor Anderson continues to use high standards for his textbook, and I recommend it for use in technical communication and professional writing classes that need a comprehensive view of the field.

Charles R. Crawley

Paperless: Real-World Solutions with Adobe Technology

J. P. Terry. 2009. Berkeley, CA: Adobe Press. [ISBN 978-0-321-65887-6. 318 pages, including index. US$54.99 (softcover).]



The term *paperless office* is nothing new; it was first introduced way back in 1975 in a *Business Week* article. Over thirty years later, the complete elimination of paper in the workplace has not been realized. The paperless office still has its skeptics, including Abigail Sellen and Richard Harper, authors of the aptly titled *The Myth of the Paperless Office* (MIT Press, 2002). But it is safe to say the paperless office is now much more than a futuristic idea with a lot of promise. Organizations are currently experiencing impressive results by making workflow changes involving paperless technologies.

Paperless: Real-World Solutions with Adobe Technology presents eight case studies to showcase paperless success stories and includes in-depth technical exercises for using several Adobe products. J. P. Terry is a natural choice to write this book. He is the chief executive officer of SmartDoc Technologies, a company that specializes in developing paperless solutions, and has over twenty years of industry experience.

Each of the three main sections of the book is devoted to one or two Adobe products. The first section is on Acrobat and LifeCycle Designer. Acrobat is the family of commercial versions of client software used to create and view files in the Portable Document Format (PDFs), the format created by Adobe for document exchange. LifeCycle Designer comes with Acrobat Professional (on Windows) and is used to create advanced and feature-rich interactive and dynamic documents.

The second section covers LiveCycle ES/ES2 (ES is short for Enterprise Suite), Adobe’s server software that automates many of the server-side processes that today’s paperless systems require. The final section is on InDesign Server, the server version of Adobe’s page layout program. These last two sections devote much

space to the much more advanced components of paperless systems but still include several case studies, which can be read even without taking the time to do the exercises.

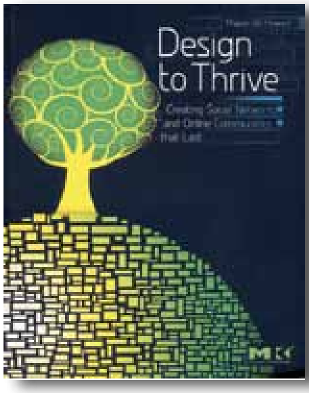
Paperless is definitely useful for technical communicators, but to get the most use out of it, it will help to know what tasks you want to accomplish. If you are interested in writing comments in PDFs, which can be circulated among colleagues to review by e-mail or on a shared server, read the chapter sections "Understanding Reader Extensions" and "Collaborating on PDF Documents." If you want to learn how to create forms, especially ones that support user input, read "Introducing LiveCycle Designer" (Chapter 5). Details on PDF password security, digital signatures, and other tasks may also be of interest to you.

The book succeeds as an exhaustive resource about paperless technologies. In the informative introduction, Terry clearly states which software versions of Adobe products (a minimum of Acrobat Professional 9.1 for Windows for Section 1) are required for completing the exercises throughout the book. Terry deserves high praise for designing the sample files (available for download at a companion Web site) so that if you struggle with a step in an exercise, you can open a completed file to be able to continue and complete the exercise.

David Kowalsky
David Kowalsky is a technical writer for NEC Corporation of America. He received his MA in East Asian studies from Washington University (St. Louis) and a certificate of technical writing and editing from the University of Washington. He is a senior member of STC's Puget Sound Chapter.

Design to Thrive: Creating Social Networks and Online Communities That Last

Tharon W. Howard. 2010. Burlington, MA: Morgan Kaufmann. [ISBN 978-0-12-374921-5. 248 pages, including index. US$39.95 (softcover).]



Tharon Howard, who has over 30 years of experience researching social networks, presents ways of building social networks and online communities by using techniques for gathering and keeping active members. His great resource provides practical advice on

Building successful and sustainable social networks and online communities

Achieving long-term success of online communities through RIBS—remuneration, influence, belonging, and significance

Design to Thrive is organized into eight chapters, each of which ends with a conclusion and a list of works cited. Each chapter includes a description, useful figures, and techniques that highlight relevant examples. The most practical chapters are "The Nature of the Beasts," "Remuneration," "Influence," "Belonging," and "Significance."

"The Nature of the Beasts" provides an excellent comparison of social networks and online communities. Howard defines *social networks* as sites that allow users to create a profile and articulate with other users with whom they share a connection. *Communities* are made up of users who interact with a shared purpose or interest. Also discussed in this chapter are groups, forums, and lists and how they fit into social networks and online communities.

The concept underlying *remuneration* is that people need to believe they will obtain some positive return on the investment of their time and energy in order to be attracted to continued participation in a community. This chapter focuses on how to grow the user experiences that are the key to long-term success. At the end of the chapter, specific techniques are listed that can be applied toward growing remuneration in your social network or community. One technique listed is ranking the value of members' messages. Ranking

messages remunerates members by giving them a goal to shoot for (a high rank) and also discourages inappropriate postings.

Reassuring members that they have a voice in the community is the essence of *influence*. Howard reviews three major approaches to understanding members of social networks and communities. One technique is to respond to every concern without “administrivia.” Using this best practice, you inform members why a decision was made while reassuring them that you didn’t dismiss or ignore their input.

You’ve achieved *belonging* when members identify with each other and feel strong emotional attachment. Of particular interest are Howard’s details on how to use standard “rituals, schemes, and protocols” (p. 129) in helping members understand how they’re expected to respond in specific situations.

Making your members feel that participating in your community is important creates *significance*. Your community needs to be well recognized and valued by people your users respect. One trick is connecting with other leaders in social media and using them to attract users to your community.

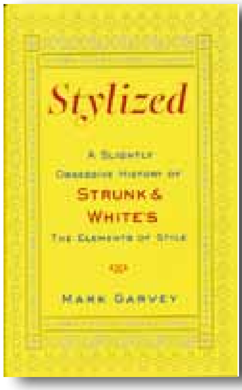
Professionals in technical communication will find this book packed with relevant information, especially given the evolving role of communicators in new media. Writers and editors can put best practices to use in working with their employers, with clients, or within their own professional lives.

Overall, Howard provides useful information, although a checklist that summaries the RIBS concepts and could be used as a reference would be a welcome addition.

Angel Belford

Stylized: A Slightly Obsessive History of Strunk & White’s *The Elements of Style*

Mark Garvey. 2009. New York, NY: Touchstone. [ISBN 978-1-4165-9092-7. 208 pages, including index. US$22.99.]



Few books have done so much to establish an ideal for the plain style in American prose as Strunk and White’s *The Elements of Style***.** For more than half a century it has been a favorite of writers seeking advice, be they students struggling with their first essays or seasoned professionals needing to be reminded yet again to “omit needless words.” Now in its fourth edition, it has been continuously in print since 1959, has sold more than 10 million copies, and has achieved iconic status for those who are passionate about grammar, style, and usage.

It has also had a remarkably interesting history.

In *Stylized*, longtime publishing veteran Mark Garvey tells the full story of *Elements* and why it continues to matter, while relating many delightful anecdotes about the book. Drawing on archival material, original interviews with noted writers, E. B. White’s often delightful correspondence with readers, and other material, Garvey covers how *Elements* came to be written, how it relates to other writing guides, how it has changed, and how it has often served as a lightning rod for critics staking out positions in the culture wars, and more.

Part of the story will be familiar to *Elements* readers from E. B. White’s introduction. White tells how *Elements* began in 1918 as a self-published quick reference which Cornell professor William Strunk sold to his freshmen English composition students—White included—to help them eliminate clunkiness from their writing; how years later a friend sent White a copy of the long-forgotten book; how White, a staffer for the *New Yorker*, seized the occasion to write an appreciation of his former teacher and his “little book”; and how this led to an invitation to edit and update *Elements*.

Stylized considerably fleshes out the story. It includes biographical chapters on each of the authors and never-before-published photographs and other material that

sheds light both on the men and on what they were attempting to achieve. Garvey also discusses the editing of *Elements* and how White and later editors struggled to keep each edition true to the original while making adjustments to meet modern needs and tastes.

For all its popularity, *Elements* has not been without its critics, some quite vehement. While confessing to finding many of the criticisms over the top, Garvey lets the critics have their say and does his best to explain the issues involved and answer the criticisms with grace and good humor.

With *Stylized*, Garvey has delivered an entertaining and informative appreciation of *Elements* and the role it has played in the life of the culture. If you are a fan of *Elements*, or just someone who wonders what all the fuss is about, *Stylized* should help you understand the fondness and respect many have for the "little book."

Patrick Lufkin

The New Community Rules: Marketing on the Social Web

Tamar Weinberg. 2009. Sebastopol, CA: O'Reilly Media. [ISBN 978-0-596-15681-7. 345 pages, including index. US$24.99 (softcover).]

Social media marketing can drive traffic and relevant links to your Web site, foster brand awareness, entice readers to purchase your product or service, and help manage your reputation, according to *The New Community Rules: Marketing on the Social Web*. Tamar Weinberg discusses various forms of social media engagement, from the better known—such as blogging, Twitter, and social networks (for example, Facebook)—to the more obscure social bookmarking and niche social news sites. She also briefly covers podcasting and other visual media. In terms of breadth of coverage, the book provides a useful overview of the various social media available at this time.

Unlike traditional marketing, social Web marketing is a two-way street where readers can—and will—respond to a company's statements while also expecting their specific questions to be answered. Weinberg repeatedly stresses that the social Web consists of communities who generally frown upon overt marketing. These communities instead expect that participants contribute to discussions, answer questions, and are generally helpful to other community members. This means that more subliminal marketing emphasizing individual company employees' unique voices is needed. The book provides a number of case studies showing how such marketing has benefitted specific companies.

The New Community Rules seems geared toward companies selling to end consumers, and within these companies, to the marketing-savvy. Visually separate definitions explain many Web terms, but marketing terminology is not explained—presumably because readers are assumed to be familiar with it. Given this target audience, the book might not be particularly helpful for technical communicators attempting to market themselves or their company.

Some statements in each chapter are footnoted, but unlike annotations in standard format, the footnotes themselves are simply URLs for specific Web pages, without any indication of what exactly the URL is pointing to. In the body text itself, sometimes very specific information on tools and sites—including subscription pricing—is provided. Given the speed at which both URLs and pricing change, much of that information is likely to be outdated long before the book is out of print.

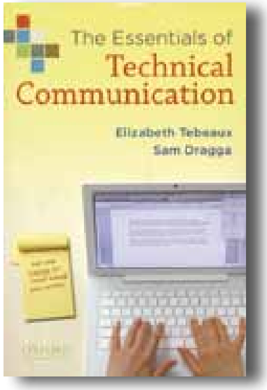
Like the social media it covers, *The New Community Rules* is fairly chatty, at times providing excessive detail on specific tools and sites, while briefly summarizing—or entirely omitting—others. The chapter on social networks, for example, lists international professional social networks but omits Xing, one of the most widely used networks in continental Europe. Weinberg also frequently repeats a point, sometimes even rephrasing it in the next sentence. This repetition, as well as a number of grammatical and orthographic errors, could have been avoided by more careful copyediting and proofreading.

All in all, this is a useful overview, albeit one that could use some work.

Barbara Jungwirth
After writing software documentation and managing an IT department, Barbara Jungwirth now translates technical documents from German to English. She owns reliable translations (www.reliable-translations.com), is on LinkedIn and Xing, and writes a blog, On Language and Translation (http://reliable-translations.blogspot.com/).

The Essentials of Technical Communication

Elizabeth Tebeaux and Sam Dragga. 2010. New York: Oxford University Press. [ISBN 978-0-19-538422-2. 349 pages, including appendixes. US$49.95 (softcover).]



The Essentials of Technical Communication balances the comprehensiveness of the textbook with the efficiency of the pocket guide. It takes a practical approach to the basic reality of technical communication, namely, writing for people who don't want to read. Employing the principles of document design that it recommends, the book models the efficiency it promotes as the essence of technical communication.

The text consistently reminds students of a fundamental reality: "In the workplace, no one wants to read what you write—seriously" (p. xv). So getting to the point clearly and efficiently is critical. For students used to instructors who read everything they write, this fact comes as a surprise. As the authors imply, however, the particular attributes of technical communication—focus on audience analysis, document design, efficiency, and legal and ethical consequences—all ultimately arise from having to write for reluctant, unpredictable readers. The instructor can point to the author's emphasis on this underlying reality to show the "why" behind the "how," thereby helping students understand the relevance of the seemingly idiosyncratic attributes of technical communication.

Each chapter begins with a "Quick Tips" box that illustrates the importance of an abstract or executive summary and ends with a summary checklist that demonstrates the importance of conclusions. The body of each chapter is formatted with headings, lists, and graphics that visually display the conceptual relationships discussed. And each chapter employs the same document design techniques to demonstrate how consistency in formatting enhances efficiency in communication. The authors teach not only by telling and showing students what to do, but also by *doing* what they advise.

Equally practical and helpful are the authors' repeated admonitions that successful technical communications must fit the targeted audience's varied knowledge and behavioral profiles; that technical documents survive indefinitely, may be read by anyone at a later time, and therefore carry ethical and legal repercussions; that documents are used, not just read, so that devices such as hierarchical headings, lists, tables, white space, numbered lines, and graphics are necessary to enhance efficiency of understanding (students are advised to "Reveal your design to your readers" [p. 65]); and that technical communications must be clearly, efficiently written to allow for all kinds of reading—reading only the abstract, reading only sections of interest, reading in fits and starts, and reading closely the entire report, including appendixes. The message is to design the document for all reading styles, not just the captive audience of the instructor.

The chapter on graphics advises keeping "illustrations as simple as possible" and avoiding "artistic but misleading graphs" (p. 85). Again the authors emphasize doing only what is necessary, but all that is necessary, in matching the document to the audience. Examples of effective and ineffective graphics are included, as well as examples of unethical illustrations. Before-and-after examples highlight the efficiencies achievable through document design (reducing text blocks to lists and tables, for instance).

The book also focuses on specific applications of document design. E-mail and letters must be short yet complete, indicate their topic clearly in the subject line, and use a professional tone (the emphasis on tone is especially refreshing and very important, given the enormous increase in e-mailing and texting); technical and formal reports are covered as variants of a basic structure—not as fully developed subgenres needing their own chapters—keeping the book concise and focused; and students are advised not to think of the executive summary or abstract as "routine report 'paperwork' needing only perfunctory writing" (p. 163)

but rather as the most important component of the document, the one most likely to be read.

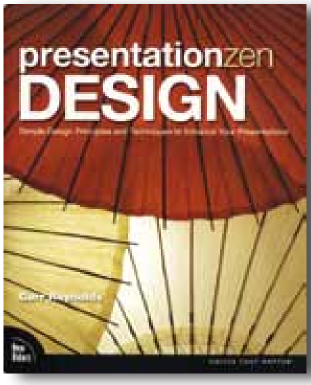
The authors also explain RFPs, SOWs, and similar documents unfamiliar to students; why the audience must be explicitly guided through oral reports; and how to design presentations as modules that add up to the total time allowed. Each chapter also includes an exercise requiring students to apply what they learned to examples from real company Web sites. The final chapter offers practical guidance on job hunting; appendixes on grammar and usage, style sheets, and a sample report round out the text.

This book judiciously balances between the comprehensive textbook and the cursory pocket guide, allowing the instructor optimum flexibility in using it. It practices what it preaches through tight organization and usable document design and maintains consistent focus on the challenge of writing for readers who don't want to read. The text definitely lives up to the promise of providing the "essentials" of technical communication and is perfect for an introductory course. Highly recommended.

Donald R. Riccomini
Donald R. Riccomini is a member of STC and a lecturer in English at Santa Clara University, where he specializes in teaching engineering and technical communications. He previously spent 23 years in high technology as a technical writer, engineer, and manager in semiconductors, instrumentation, and server development.

Presentation Zen Design: Simple Design Principles and Techniques to Enhance Your Presentations

Garr Reynolds. 2010. Berkeley, CA: New Riders. [ISBN 978-0-321-66879-0. 254 pages, including index. US$34.99 (softcover).]



As the professional world becomes more interconnected via all forms of media, there is a growing need for professionals to become excellent presenters. The ability to deliver an effective, appealing, and clear presentation is a skill that is essential for all disciplines of study and professional careers. *Presentation Zen Design*, by Garr Reynolds, is written for this audience: the educated and experienced professional who may have little background in the design and appearance of slides. His goal is to take essential elements of design principles and explain them in a practical and applicable way.

A 20-year resident of Japan, Reynolds is inspired by Japanese traditions and ideologies. His title alludes to this inspiration. Reynolds selects specific harmonious elements of Japanese culture that he weaves into his straightforward style of explaining the critical elements of design by chapter: type, color, images, space, focus, and harmony.

He opens with one of these themes, harmony, in a discussion of Japanese food. *Washoku* is a Japanese-style meal that brings to mind many principles essential to design. It is prepared with the idea that the presentation of the food is as important as the taste. Harmony and balance guide the chef in preparing the perfect meal. The careful selection and exclusion of various elements of the meal create the overall appeal of the presentation. Reynolds calls attention to *washoku* as an everyday lesson in design. These lessons are all around us if we choose to see them.

Reynolds effectively incorporates case study examples. In the section on color, for example, he includes a text-inset section by expert Maureen C. Stone. It includes a brief biography and a two-page summary of what she feels designers should know about

color. These valuable short excerpts by outside experts are included throughout the text to provide other perspectives on particular elements of design, resulting in additional information as well as support for the book's main message.

A designer/author would be expected to have impeccable design within his own text, and to this end Reynolds is successful. The use of white space and the overall layout of the book illustrate the principles he explains. For example, each page has a wide margin of white space around the text. Occasionally, an entire page of white space is included with only a single quotation from a famous person that supports the main idea of that chapter. For example, the chapter about presenting data contains a quotation from the well-known physicist and science communicator Richard Feynman: "You can always recognize truth by its beauty and simplicity" (p. 144).

Reynolds weaves in several other specifics of Japanese culture to illustrate principles of Zen. He describes traditional Japanese umbrellas (*wagasa*), flower arrangement (*ikebana*), and alcoves for the display of art (*tokonoma*). Each element supports the overall idea of complexity expressed with simplicity, harmony, and balance.

No explanation is complete without real-life examples of effective presentation slides. Reynolds includes an entire chapter of examples. He annotates the slides to indicate their key design components, providing a quick reference.

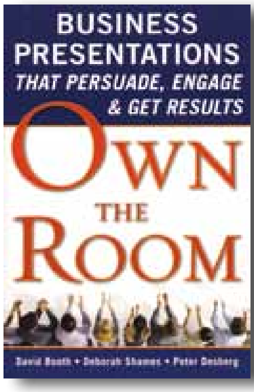
The book concludes with purely motivational information about how to start a journey of improvement. Reynolds points to *hansei*, a self-introspection process in which progress is assessed and improvements proposed. It is the key to learning. We can also use the principle of *kaizen*, or continuous improvement, to take steps forward in implementing design principles. Reynolds also reiterates his original message about noticing everyday lessons surrounding us on a daily basis. By looking at billboards, packaged items, brochures, and signs along the street, we can learn design lessons each day. It is only necessary to pay attention and notice these everyday items.

Overall, Reynolds provides an excellent overview of design for the nondesigner. For the scientist, teacher, health care professional, and everyone in the business world, this book serves as a guide to the most essential elements of design. From the use of space and color to the placement of objects and the overall appeal and harmony of design, there is something in this book for everyone.

Julie Kinyoun
Julie Kinyoun is a freelance writer who also teaches introductory chemistry and physical science courses at community colleges in southern California.

Own the Room: Business Presentations That Persuade, Engage & Get Results

David Booth, Deborah Shames, and Peter Desberg. 2010. New York, NY: McGraw-Hill. [ISBN 978-0-07-162859-4. 272 pages, including index. US$18.95 (softcover).]



We have all heard the adage "show, don't tell." That is the basic premise of *Own the Room*. Instead of repeating the stodgy, conservative style of business presentations full of bland facts and figures, the authors recommend enlivening your presentations with stories and surprise. The authors are an actor, a director, and a psychologist, all of whom bring their expertise to their modern presentation style.

The book reads as if the authors were giving a presentation, switching speakers in each chapter. Although unclear at first, this method lets them deliver personal and entertaining anecdotes. To explain your movements during a presentation, says Booth the director, for example, "if I want to shake the actors out of complacency or flat line readings, I change the blocking" (p. 169).

Own the Room offers a lot of useful information and entertaining stories, including pointers for making each stage of your presentation more interesting: Grab your audience's attention at the start, use appropriate anecdotes to maintain surprise and intrigue, and drive your point home at the end. The authors include many specific examples of speeches using both their method and the conservative style so you can compare and contrast. They also make many interesting similes,

such as how picking a team to give a presentation is like constructing a string quartet: “As in music, we are attracted to counterpoint” (p. 151).

Although most of the book can help you gain confidence, the authors devote a chapter to overcoming stage fright. Part of overcoming stage fright is being well prepared. After explaining the four stages of stage fright, they suggest cures such as breathing exercises for managing your anxiety and “changing your behavior, which is directly under your control” (p. 133).

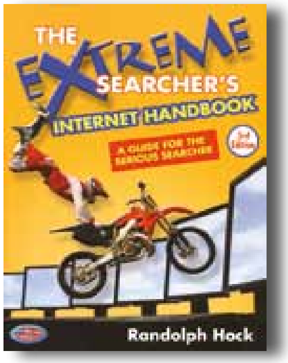
One improvement would be a recap at the end of each chapter. For example, it would be useful to have lists of the roles a presenter can take, with related page numbers. Although the headings are easy enough to find, quick reference lists would make navigation easier.

All in all, I find the suggestions workable. For example, anecdotes are better for explaining “why” because we “tend to believe anecdotal evidence over facts and figures” (p. 52). And surprise engages your audience because (as Steven Johnson says) “researchers now believe that there is an entire neurochemical system in the brain devoted to the pursuit and recognition of new experiences” (p. 48). I plan to apply the authors’ approach to creating more engaging tutorials and e-learning.

Angela Boyle
Angela Boyle is a technical writer for Tyler Technologies, Inc., where she has worked since 2006. She graduated from the University of Washington with a BS in technical communication.

The Extreme Searcher’s Internet Handbook: A Guide for the Serious Searcher

Randolph Hock. 2010. 3rd ed. Medford, NJ: CyberAge Books. [ISBN: 978-0-910965-84-2. 339 pages, including index. US$24.95 (softcover).]



At first glance, *The Extreme Searcher’s Internet Handbook: A Guide for the Serious Searcher* may appear to be a guide to better use of Internet search engines. And that is one of the topics covered by author Randolph Hock. But he goes beyond search engines to provide a whole spectrum of online resources for finding data, photos, audio and video, opinions, products, news, people, and more that all have the potential for becoming essential items on what he calls your “internet reference shelf” (p. xxiv).

Hock has worked as a university librarian, and he approaches this book like a reference librarian who wants to share what he has learned about finding information online. His stated goal is to provide “a guide for researchers, students, writers, librarians, teachers, and others, covering what serious users need to know to take full advantage of internet tools and resources” (p. xxi). As might be expected, Hock spends a good portion of the book on the ins and outs of the major search engines (Google, Yahoo!, Bing, and Ask). Search parameters and features of each are compared, and screen shots aid in his explanations of what the results offer. If you regularly use these search engines, there may not be much new for you here, although I did pick up a few tips that should help me refine my future results.

What I find most useful about *The Extreme Searcher’s Internet Handbook* are the resources other than the search engines. Hock introduces you to a whole realm of directories, portals, forums, aggregation sites, locators, one-stop reference Web sites, and other tools that may or may not be accessed by search engines for various reasons. Not only is it useful to have a computer handy when reading this book, but be prepared to be sidetracked by Web sites and other resources you didn’t know existed. While the target audience for the book is the general computer user and not necessarily technical communicators, there are many resources, such as

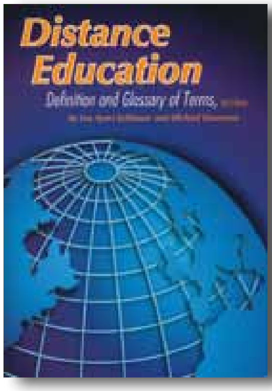
specialized medical and scientific directories, forums for technical troubleshooting, and writing resources, that could provide valuable support and information for anyone in technical fields.

This third edition of *The Extreme Searcher's Internet Handbook* includes a general overview of sharing and networking websites, and Hock describes Web 2.0 sites, such as LinkedIn and Blogger. He provides some advice on setting up a Web site but does not go into detail about optimizing them to improve search engine results. Both his own Web site at www.extremesearcher.com and a list of URLs at the back of this handbook list all the URLs that he uses as examples.

Linda M. Davis
Linda M. Davis is an independent communications practitioner in the Los Angeles area. She holds a master's degree in communication management and has specialized in strategic communication planning, publication management, writing, and editing for more than 20 years. Linda is a member of IABC.

Distance Education: Definition and Glossary of Terms

Lee Ayers Schlosser and Michael Simonson. 2009. Charlotte, NC: Information Age Publishing, Inc. [ISBN 978-1-60752-138-9. 249 pages. US$45.99 (softcover).]



It might appear as if a book that announces in the title that it is going to be a list of terms might be simply utilitarian in providing only that type of information. However, in *Distance Education: Definition and Glossary of Terms*, the definitions associated with distance education are perfectly prefaced with thought-provoking discussions about distance education in general. In fact, the chapters that precede the definitions provide you with a more thoughtful context in which to interpret the definitions, for it is only in reading about, understanding, and acknowledging the complexity of distance education and many of the issues surrounding it that you can begin to grasp the multiple interpretations that are possible for each term presented in the latter part of the book. The first three parts of this book provide you with enough background information that you can hold intelligent conversations with colleagues and students about distance education as well as help them understand the meaning and complexity of the terms.

The opening chapters provide a brief history of distance education and then short introductions to theories associated with distance learning, such as andragogy, independent study, and industrialization of teaching. The second part provides information about the current status of distance education and thoughts on what is yet to come, such as in accreditation. Then you get an overview of research in distance education, including current literature reviews in several key areas, as well as mention of the gaps in research and where more attention is needed.

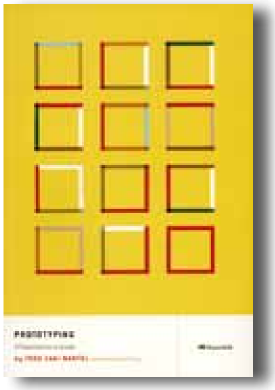
Throughout this book, the authors fully acknowledge the dynamic nature of distance education. For instance, you cannot separate hardware from learning theories, because one aspect of distance education influences another. This book does an excellent job of covering the wide spectrum of concepts related to distance education, including hardware, software, learning theories, and instructional design and platform terminology.

If you are teaching an online class, work as an instructional designer, or are at an institution that offers distance education, *Distance Education* is a must-read for the background information and as a reference when conversations about distance education arise.

Diane Martinez
Diane Martinez is a writing specialist for Kaplan University's online Writing Center and a PhD student at Utah State University. Her technical writing experience has been mostly in higher education, engineering, and government contracting. She has been with Kaplan since 2004 and a member of STC since 2005.

Prototyping: A Practitioner's Guide

Todd Zaki Warfel. 2009. Brooklyn, NY: Rosenfeld Media. [ISBN 978-933820-21-7. 197 pages, including index. US$36.00 (softcover).]



I had started a series of sketches, sort of pre-prototypes for a large software redesign project, when I picked up Todd Zaki Warfel's book. I'd become acquainted with his work while editing articles for *Boxes and Arrows*, the information architecture-focused webzine.

Warfel's book is wonderful. I've been doing software and Web site information architecture and prototyping for a number of years, and I learned several tricks and techniques from this book that I will put into practice.

What makes a book on prototyping good? For one thing, it addresses the basics: Who is your audience? What are the foundations and best practices? How do you select the prototyping methods that you should use? When should you use them?

Few books start with frequently asked questions, but this one does. And the questions are appropriate for the book's audience: visual/graphic designers, interaction designers, information architects, usability engineers, or even business owners—anyone who wants to learn how to use the power of prototyping to increase and improve communication within the company and with customers or system users to avoid costly development mistakes.

After explaining the value of prototyping, the process, and the five types of prototypes, Warfel shares his Eight Guiding Principles:

Principle 1: Understand your audience and intent.
Principle 2: Plan a little—prototype the rest.
Principle 3: Set expectations.
Principle 4: You can sketch.
Principle 5: It's a prototype—not the Mona Lisa.
Principle 6: In you can't make it, fake it.
Principle 7: Prototype only what you need.
Principle 8: Reduce risk—prototype early and often.

Warfel really makes his case with these principles; if anyone can encourage you to start sketching, he can.

Six chapters discuss specific prototyping methods, from paper prototyping to coded HTML. Each chapter provides a matrix that shows how well a given method works according to a number of important characteristics, such as whether it is Mac- or Windows-compatible (for software), where in the design process it is most useful, whether it is distributable (it is difficult, or example, to use paper when you work with a virtual team), and whether it generates reusable code. You can find a matrix for all the methods on a foldout at the front of the book.

The book is loaded with case studies, tips, resources, and examples. More resources and graphics are available from the publisher's Web site and Warfel's Flickr site as well.

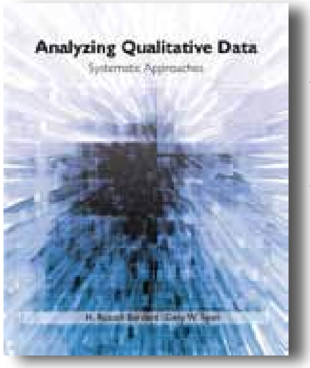
If you aren't already sold on the value and merit of prototyping, whether for some physical entity or for software, this book will convince you that this should be an integral part of your design process. If you use only a couple of the described methods, you'll learn a few more for your toolbox. Whether you are a seasoned prototype veteran or a novice, if you are considering prototyping, this is the book for you.

Elisa Miller

Elisa Miller, senior member of STC, is a senior user experience engineer for GE Healthcare. She's a past president of the Lone Star community as well as an active member of the STC Usability & User Experience SIG.

Analyzing Qualitative Data: Systematic Approaches

H. Russell Bernard and Gery W. Ryan. 2010. Los Angeles: Sage. [ISBN 978-0-7619-2490-6. 451 pages, including appendix, references, and indexes. US$55.95 (softcover).]



Most technical communicators are familiar with quantitative data analysis, both in the materials they work with and in the various counts that marketing departments provide. Handling quantitative data is fairly straightforward, as technical communicators apply both descriptive and parametric statistics to arrive at averages, trends, and most and least liked features. Perhaps even more frequently, they deal with qualitative data in feedback from user and focus groups, responses to user interfaces and Web sites, and comment cards. These data require different handling, especially because such analysis is becoming more and more important as people realize that numerical responses do not tell the whole story. In fact, qualitative research is of such importance that *Technical Communication* devoted a special issue to it (November 2008), and Jamie Conklin, the editor of that issue, has coedited a forthcoming anthology on qualitative research in technical communication.

Bernard and Ryan's textbook offers technical communicators who need to understand how to handle and what to do with such data a full range of practices that will prove useful when they confront them. The authors divide their book into two main parts: "The Basics" and "The Specifics." They also include an extensive list of resources, including software that does most of the analyses, starting with transcription and voice recognition software, and a list of journals addressing analysis of qualitative data.

"The Basics" provides those new to qualitative data collection and analysis sufficient background in collecting and analyzing the data, techniques to use to recognize themes and trends in the data, techniques for developing codebooks and code, and an overview of the conceptual models applied in such research. While the book is aimed at students in introductory classes in qualitative data analysis, the authors present the basics in a style that makes it easy for readers to grasp the essentials and either review or skip parts that would be redundant for them.

In the section on specifics, the authors cover topics that could bear directly on quality control in technical communication projects. For example, they address cross-cultural communication, a major issue in technical communication today, in the chapter on cultural domain analysis and pages on cross-cultural content analysis.

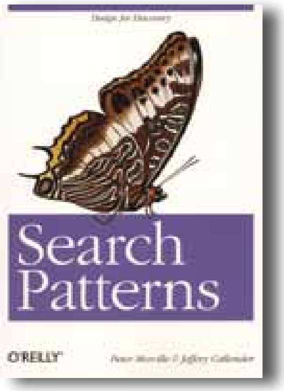
Additionally, several chapters address the kind of data that technical communicators need for analyzing existing documents. The authors also cover narrative analysis (useful for examining focus group discussions) and sampling.

For academics, especially those teaching graduate courses in research methodology, this text offers students a complete survey of the various analytical techniques they will use both in their graduate work and later on the job. For technical communicators who collect qualitative data and need to know what to do with them, the book offers a wide range of alternatives and easy-to-follow discussions of the various analytical techniques.

Tom Warren

Search Patterns

Peter Morville and Jeffery Callender. 2010. Sebastopol, CA: O'Reilly Media, Inc. [ISBN 978-0-596-80227-1. 180 pages, including index. US$39.99 (softcover).]



Search Patterns uses a creative format that insightfully frames the theme of this book: visualization and innovativeness in s earch design.

Beginning with the preface, which uses a series of graphic panels, including a PowerPoint presentation, you know that you are in for a ride that will pique your interest and get you thinking creatively. Indeed, this book isn't so much about tried-and-true search patterns and best practices, although those are covered, as much as it is about the creative force behind search design. As the authors state, this book is intended for designers, information architects, students, entrepreneurs, and "*anyone who cares about the future of search*" (p. ix; my italics).

With search an integral part of the Internet/intranet/kiosk experience, it is important to get it right when designing a new search. What this book stresses is that to get it right, you need to visualize; you need to go outside the boundary of what exists to find the next best search.

The authors lay the groundwork. They provide the basics about the search function. Users go to search to find a known item or to explore an idea. Designers must know how to design for the different types of searches, how to best match search output with user input. They must be advocates for the user and consider all the variables involved to develop the best design strategy. But they also must fit the design concept within the reality of the software and hardware used in search engines. Designers take what's desirable to engineers and software developers to find out what is possible, and perhaps to push what *could be* possible.

In discussing design principles, Morville and Callender focus on simplicity and ease of use. The goal, of course, is to give users what they want, or more than they want, with as little frustration on their part as possible. The authors cover the current design principles of incremental construction (for example, start with a key word and provide autoprompts), progressive disclosure (for example, start with an initial map, with overlay features available), predictability (use features easily recognizable by search users), recognition over recall (provide tools that users recognize, such as shopping carts), and minimal disruption (search results appear on the same page from which the user is searching).

The authors present 10 design patterns, from the most universal to the most nuanced: autocomplete, best first, federated, faceted navigation, advanced search, personalization, pagination, structured results, actionable results, and unified discovery. For each, they provide a high-level overview with suggested points for consideration. I would have liked more information and details and was expecting more, given the title of the book, but this presentation provides more of a springboard for design concepts.

Vision and ingenuity play definite roles in building a better search. It is vision and ingenuity, in fact, that will enable search to go beyond what is to what could be. The authors present different scenarios of what search might look like in the future.

This book is not a how-to on existing search patterns, but rather a gentle guide through the basics of *what is* to the future of *what could be*. It is a book that could provoke thoughtful discussion and planning of what can go into a new search design.

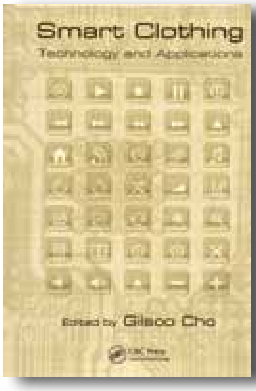
Barbara Scott Zeller

Barbara Scott Zeller has over 20 years of experience in technical communication. She has written, edited and designed a variety of publications for corporations and nonprofit organizations. She is a senior member of STC and is currently a senior technical writer for a financial institution in Minneapolis, MN.

Smart Clothing: Technology and Applications

Gilsoo Cho, ed. 2010. Boca Raton, FL: CRC Press. [ISBN 978-1-4200-8852-6. 276 pages, including index. US$89.95.]

> *"I think, I think I am, therefore I am, I think."*
> "In the Beginning," Moody Blues, 1970



That quote accurately describes the state of smart clothing in 2010. Smart clothing has been an artificial intelligence (AI) frontier for decades. Considering its current status as well as prognostications, the inevitable conclusion is that it mirrors an old joke I first heard in the 1970s, 1980s, 1990s, and so on: "In five years, we will finally have attained true artificial intelligence." In the ensuing decades, what we have mostly discovered is the complexity of intelligence itself. Consequently, much of what this book examines remains tantalizingly out of reach, removed from even Moody Blues' jibe at Descartes 40 years ago.

The challenges are daunting. Smart clothing first must do something worth doing. And that's the easy part. It must also do it in a way that is safe and convenient, appealing to wearer and beholder alike. Solving these challenges is years into the future.

The book's contributed essays raise several fascinating points. One of the most fascinating is research that discovered people want smart clothing to solve problems in the order of Maslow's Hierarchy. If readers consider exposures they have had to smart clothing, then present trends in research and development seem opposed to that hierarchy, smart clothing seeming less than necessary and more a show for AI cognoscenti.

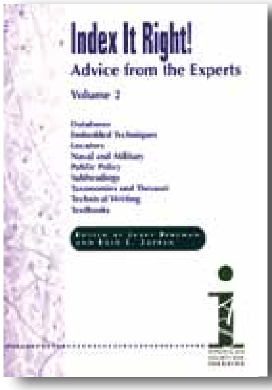
Among the important analyses in this book are nuggets revealing what smart clothing might eventually do. These range from the purely utilitarian to the imaginatively fanciful. For years, the potential of clothing to monitor health has been touted as attainable and useful. It was an aspect of Neil Gershenfeld's influential book a decade ago, *When Things Start to Think* (Henry Holt, 1999; reviewed in the November 1999 issue of *Technical Communication*). The fact that smart clothing has not matured much in the ensuing decade tells readers volumes, because prototypes of these applications remain bulky, distracting, and frankly unrealistic in terms of meeting customers' standards of appeal and convenience. One exception, however, may be solar panel clothing that can be used to charge the increasing range of electronic equipment people carry at all times. Perhaps midrange between pure functionality and pure fancy are some of the examples of photovoltaic clothing addressed in the book. Runners and bikers use clothing with highly reflective strips that show from hundreds of yards away when struck by automobile headlights. The next step is clothing that glows on its own. At the purely fanciful end of the spectrum is photovoltaic clothing that illuminates and changes color in response to sound, light, body chemistry, emotion, and so on, the textile equivalent of mood rings, one would suppose.In the end, this is a fascinating but odd book, because it marries a writing style aimed at general readers to mathematics and chemistry appropriate for industry experts alone. General readers will trip over the hard parts, while experts may find the tone condescending. And nowhere does anyone address how to clean smart clothing.

Charles H. Sides

Charles H. Sides directs the internship program for the Department of Communications Media at Fitchburg State College. He has published seven books and over two dozen articles on technical and professional communication. Executive editor of the Journal of Technical Writing and Communication, he also edits Baywood's technical writing book series. He consults actively.

Index It Right! Advice from the Experts, Volume 2

Janet Perlman and Enid L. Zafran, eds. 2010. Medford, NJ: Information Today, Inc., in association with the American Society for Indexing. [ISBN 978-1-57387-396-3. 170 pages, including index. US$40.00 (softcover).]



Index It Right! Advice from the Experts is aptly named. Its 10 authors cumulatively represent over 200 years of indexing and related work experience. Therefore, the first thing a prospective reader should know is that this work is intended for practicing indexers who already have at least some professional indexing experience or at least familiarity with the field. The advice these experts offer is so concentrated and detailed that the casual reader will probably not find it so useful.

Having gotten that issue off the table, I will say that I am delighted by the breadth of subject matter, the relevance of the discussions, the attention to practical considerations for indexing projects, the high editorial standards maintained for the work, and—extra important in a work on indexing—the excellence of the index. It was particularly gratifying to see the indexer's name (Jennifer Burton) attached to the index and her biography included in the list of contributors.

The editors are themselves experienced indexers, and they have selected a good mix of topics for this volume. Victoria Agee and Margie Towery cover subheadings in great detail, including many illustrative examples and citations to classic indexing texts. Janet Russell handles the important and nuanced area of when and how to differentiate locators. (If you don't know what this means, you're probably not an indexer!) Leoni Z. McVey explains the considerations that are especially important when indexing textbooks. Enid L. Zafran discusses public-policy indexing, that is, topics related to governmental bodies. Deborah Patton introduces the indexing of military books and the special considerations they require.

Jan Wright presents indexing as a process within the technical writing environment, including its place in the development cycle, considerations of embedded indexing, and guidelines for typical situations encountered in that field. Linda Mamassian provides an introductory look at database indexing for the indexer who may not have experience in this specialty but who is considering entering it. Lucie Haskins gives a detailed look into the processes and software used in embedded indexing, including a frank evaluation of the advantages and disadvantages of various products. Heather Hedden introduces the basics of and distinctions among various models of controlled vocabularies, thesauri, and taxonomies.

Sprinkled throughout the chapters are boxed "expert tips," which emphasize some of the good advice in the text. And most chapters end with clarifying endnotes, a list of references, or both.

So much good information is packed into this small volume that I highly recommend it if you are an indexer or have some indexing training. You will find it an excellent resource whether you want to develop your understanding of the subtleties and nuances of the workday decisions you regularly make or you want to move into a new-for-you indexing specialty.

Karen Lane

Karen Lane is a freelance technical editor and indexer. She has coauthored a textbook, *Technical Communication: Strategies for College and the Workplace*, and has edited and indexed a wide variety of technical and academic materials. Karen holds a master's degree in technical communication and is an STC Fellow

Sherry Southard, Editor

The following articles on technical communication have appeared recently in other journals. The abstracts are prepared by volunteer journal monitors. If you would like to contribute, contact Sherry Southard at southards@ecu.edu.

"Recent and Relevant" does not supply copies of cited articles. However, most publishers supply reprints, tear sheets, or copies at nominal cost. Lists of publishers' addresses, covering nearly all the articles we have cited, appear in Ulrich's International Periodicals Directory.

Thanks to J. A. Dawson, who helped me assemble the manuscript for "Recent & Relevant."

Communication

Blood and expertise: The trials of the female medical expert in the Ancien-Régime courtroom

McClive, C. (2008). *Bulletin of the History of Medicine, 82*, 86–108.

Female medical experts in early modern France faced challenges to their credibility and authority as they struggled to communicate technical information during trials. "The difficulties of determining the veracity of the corporeal signs of a crime were particularly acute with regard to the reproductive female body, which was perceived to be less reliable than its male counterpart. The ability of the female medical expert to accurately and truthfully interpret such signs was also questionable, and at times she seems to have been as much 'on trial' as the bodies of those she examined."

Edward A. Malone

Early modern "how-to" books: Impractical manuals and the construction of Englishness in the Atlantic world

Mylander, J. (2009). *Journal for Early Modern Cultural Studies, 9(1)*, 123–146.

The author argues that a book on husbandry by Gervase Markham (1568?–1637) and two medical books by Nicholas Culpeper (1616–1654) served as markers of English "identity in the unfamiliarity of the 'New World…. [These how-to manuals did not shape] the predominant economic and agricultural practices of the English Atlantic world"; they remained popular for decades in part because they performed useful ideological work: "they each promoted images of self-sufficient Englishness…. [The author] challenges the assumption that early modern 'how to' books are merely transparent records indicating common practice…. [As Roger Chartier writes,] A book changes by the fact that it does not change when the world changes."

Edward A. Malone

Magic, science and masculinity: Marketing toy chemistry sets

Al-Gailani, S. (2009). *Studies in History and Philosophy of Science, 40*, 372–381.

This article is a case study in the history of technical marketing communication. "At least since the late nineteenth century, toy chemistry sets have featured in standard scripts of the achievement of eminence in science, and they remain important in constructions of scientific identity. Using a selection of these toys manufactured in Britain and the United States, and with particular reference to the two dominant American brands, Gilbert and Chemcraft, this paper suggests that early twentieth-century chemistry sets were rooted in overlapping Victorian traditions of entertainment magic and scientific recreations. As chemistry set marketing copy gradually reoriented towards emphasizing scientific modernity, citizenship, discipline and educational value, pre-twentieth-century traditions were subsumed within domestic—and specifically masculine—tropes. These developments in branding strategies point to transformations in both users' engagement with their chemistry sets and the role of scientific toys in domestic play."

Edward A. Malone

"Reconstruction" and interpreting written instructions: What making a seventeenth-century plane table revealed about the independence of readers

Willmoth, F. (2009). *Studies in History and Philosophy of Science, 40*, 352–359.

"This paper reports the experience of reconstructing a surveying instrument—the plane table—using the description found in Arthur Hopton's Speculum topographicum: or The topographicall glasse (1611): 'Of the Plaine Table, with a description thereof, and the parts thereunto belonging'. One of the most detailed early printed descriptions of the instrument, it is illustrated with woodcut diagrams of components but no image of the complete plane table. The reconstruction process did not prove entirely straightforward. An examination of its various stages reveals how Hopton's text set out to persuade and lead the reader, rather than issuing orders to be followed exactly; the reader, left to make some decisions himself, would thus create a plane table with an element of uniqueness in its character. The role of the maker of such an instrument, even when following written instructions, was a creative and collaborative one, rather than purely passive."

Edward A. Malone

Design

Caribbean immigrants' discourses: Cultural, moral, and personal stories about workplace communication in the United States

Bridgewater, M. J., & Buzzanell, P. M. (2010). *Journal of Business Communication, 47*, 235–265.

"The authors determined how Caribbean immigrants position themselves and make sense of their workplace communication through their storytelling. Using the constant comparative technique, they analyzed interviews with 25 Caribbean immigrants and found two discursive positionings: (a) within their cultural-moral narratives of the American Dream and (b) in stories that reproduce and resist specific intercultural workplace communication. Personal sensemaking stories broke down the monolithic cultural and moral narratives of the American Dream to display participants' perceptions about, communicative strategies for, and discursive self-positioning for handling their unique workplace experiences. They made sense of their experiences through invocation of difference discourses—race, class, gender, and immigrant status—and actively sought ways of asserting their agency materially and discursively."

J. A. Dawson

Communicating leadership: A discourse analytical perspective on the job advertisement

Askehave, I. (2010). *Journal of Business Communication, 47*, 313–345.

"This article explores the complex relationship between recruitment needs (whom to recruit) and recruitment communications (what message to communicate—and with what effect) in a Danish bank. It reports in part a large research project investigating a gender and career program launched by the human resource department in a Danish, medium-sized bank chain (referred to as 'the Bank'). Using the Bank's main written recruitment genre (the bank manager job ad) as a case in point, and including the results of two semi-structured focus group interviews, this study reveals interesting insights into organizational recruitment tactics and provides an argument for the need to explore the relationship between recruitment needs, textual choices, gender, and career advancement."

J. A. Dawson

Designing time: The design and use of nineteenth-century transport timetables

Esbester, M. (2009). *Journal of Design History*, 22, 91–113.

"This article examines how nineteenth-century transport timetables were designed, understood and used. It examines changes in timetable design during the nineteenth century, as railway timetables in particular had to convey more and more complex information ….. timetables reflected societal notions of time and

helped to construct new understandings of space; yet, the times and spaces they propagated were only some of those circulating in the nineteenth century …. the timetable is an item through which it is possible to show how design—in this instance, of information—pervaded day-to-day life [and] that the design of timetables was fundamental to passengers' ability (or inability) to find the information they required. The article therefore analyses a range of passenger responses to timetables, from comments about incomprehensibility to attempts to make timetables more relevant to their individual needs. This focus highlights the significance of design in its social context."

Edward A. Malone

E-mail privacy in the workplace: A boundary regulation perspective

Snyder, J. L. (2010). *Journal of Business Communication, 47,* 266–294.

"This study applied communication boundary management theory to examine employee responses to workplace e-mail monitoring. Specifically, a measure of perceived workplace e-mail privacy (PEP) was developed and fit to a model of antecedents and consequences. To accomplish this, the study used an online survey methodology to gather employee perceptions related to workplace e-mail monitoring. Results indicated that PEP is a two-dimensional construct capturing one's proficiency at maintaining privacy and concerns about the organization's ability to infringe on e-mail privacy. In support of the boundary management perspective, the data revealed that perceptions of workplace e-mail monitoring and PEP were related to the perceived quality of one's workplace relationships, especially with top management."

J. A. Dawson

"Give in your account": Using and abusing Victorian census forms

Dobraszczyk, P. (2009). *Journal of Victorian Culture, 14*, 1–25.

"This article examines, for the first time, the central importance of forms in an historical context by focusing on the development of the British census in the nineteenth century. ... [It] outlines changes in the production of household schedules from 1801 to 1901, their typographic characteristics, and the ways in which they were promoted by the census organizers. It considers responses to these documents through local schedules and nationwide newspaper and journal articles, shedding light on the means by which a vast and multifarious populace dealt with reading and filling out forms. The result will be to gain a picture of just how census schedules were received and negotiated by a public witnessing, and participating in, the establishment of the information state in Britain."

Edward A. Malone

The rhetorical analysis of business speech: Unresolved questions

Cyphert, D. (2010). *Journal of Business Communication, 47,* 346–368.

"Serious attention to the rhetorical analysis and criticism of the public discourse of business leaders can offer important insights about influential participants in political and social decision-making processes, contributing to the development of a coherent body of scholarship that addresses communication at the intersection of business, rhetoric, and society."

J. A. Dawson

Strategic application of storytelling in organizations: Toward effective communication in a diverse world

Barker, R. T., & Gower, K. (2010). *Journal of Business Communication, 47*, 295–312.

"Internal and external workplace diversity and the technology-induced time constraints of multinational competition make the challenge of improving organizational communication bigger than ever. Narrative paradigm or the 'storytelling' theory has been proffered as an effective cross-cultural communication tool, but this article presents the idea that storytelling goes beyond that and fills the diverse communication needs of today's heterogeneous workforce. It presents a model of storytelling as a complete organizational communication tool, discusses how to effectively apply storytelling in the diverse work environment, and proposes some opportunities for further research."

J. A. Dawson

Useful reading? Designing information for London's Victorian cab passengers

Dobraszczyk, P. (2008). *Journal of Design History, 21*, 121–141.

"Considered in an historical context, the design of information for everyday use can tell us much about the experience of reading for action. This article focuses on the extraordinary range of information designed for London's cab passengers in the nineteenth century, focusing on fare books, lists, posters and maps. The article assesses how the largely anonymous designers of these documents—publishers, mapmakers and printers—sought to address the perceived needs and abilities of their intended readers, and explores how actual readers responded, focusing, in turn, on two groups: regular cab users (invariably assumed to be upper- or upper-middle-class men) and strangers to London, whether foreigners or otherwise. The paper demonstrates how accounts of reading experience link design and use and bring into focus the effectiveness, or otherwise, of the former."

Edward A. Malone

Education

Challenges to informed peer review matching algorithms

Verleger, M., Diefes-Dux, H., Ohland, M. W., Besterfield-Sacre, M., & Brophy, S. (2010). *Journal of Engineering Education*, *99*, 397–408.

While not directly about writing, but rather informed peer review in an engineering course, this article may be of value to faculty using peer review in technical writing courses. "Peer review is a beneficial pedagogical tool. Despite the abundance of data instructors often have about their students, most peer review matching is by simple random assignment …. An expert rater evaluated the solutions of 147 teams' responses to a particular implementation of MEAs [Model-Eliciting Activities] in a first-year engineering course at a large mid-west research university. The evaluation was then used to analyze the UON [Un-weighted Overall Need] algorithm's assumptions when compared to a randomly assigned control group … Weak correlation was found in the five UON algorithm's assumptions …. Conducting informed peer review matching requires significant alignment between evaluators and experts to minimize deviations from the algorithm's designed purpose."

J. A. Dawson

A cognitive study of problem solving in statics

Litzinger, T. A., Vanmeter, P., Firetto, C. M., Passmore, L. J., Masters, C. B., Turns, S. R., Gray, G. L., Costanzo, F., & Zappe, S. E. (2010). *Journal of Engineering Education*, *99*, 337–353.

About problem solving and not writing per se, this article addresses teaching engineering students analytical problem solving skills, skills useful for writing successfully. "Even as expectations for engineers continue to evolve to meet global challenges, analytical problem solving remains a central skill …. This study involves observation of students as they execute the initial steps of an engineering problem solving process in statics … We found that the weak, and most of the strong problem solvers, relied heavily on memory to decide what reactions were present at a given connection, and few of the students could reason physically about what reactions should be present. Furthermore, the cognitive analysis of the students' problems solving processes revealed substantial differences in the use of self-explanation by weak and strong students."

J. A. Dawson

Getting an invitation to the English table—and whether or not to accept it

Rentz, K., Debs, M. B., & Meloncon, L. (2010). *Technical Communication Quarterly, 19*, 281–299.

"In this article, we trace the journey our professional writing program took from marginal area to well-supported specialty in an English department—a journey we made without sacrificing our commitment to prepare students for professional-level employment. In so doing, we explore the grounds of intellectual compatibility between our field and English studies and describe the conditions most conducive to professional writing's finding a respected place in English departments."

Christine Cranford

Instructional interventions for improving proofreading and editing skills of college students

Enos, M. F. (2010). *Business Communication Quarterly*, 73, 265–281.

"This article summarizes a dissertation study designed to determine the effectiveness of instructional interventions that focus on proofreading and editing skills of first-year college students enrolled in business communication courses …. To answer the research question, mean scores on the Grammar and Mechanic Diagnostic Assessment resulted in significant improvement for those students enrolled in Business Communication I, a course covering the basics of grammar and mechanics. In comparison, students not enrolled currently in Business Communication I showed no significant improvement between pre-assessment and post-assessment."

J. A. Dawson

Intellectual fit and programmatic power: Organizational profiles of four professional/technical/scientific communication programs

Maylath, B., Grabill, J., & Gurak, L. J. (2010). *Technical Communication Quarterly*, *19*, 262–280.

"Do programs in technical communication thrive when administered in English departments or in other configurations of administrative units? This article examines the variations in professional, technical, and scientific communication programs at four universities across the north central U. S. The first three programs have histories that led them to be housed at increasing distances from their universities' English departments. The fourth is a nascent program emerging in its university's English department."

Christine Cranford

Interpretive discourse and other models from communication studies: Expanding the values of technical communication

Williams, S. (2010). *Journal of Technical Writing & Communication, 40*, 429–446.

"This article argues that in spite of some attempts to expand the diversity of approaches in Technical Communication, the field remains rooted in an expedient, managerial, techno-rational discourse, where discourse is understood as the values that guide research, practice, and teaching. The article draws on approaches from Communication Studies, specifically discursive analysis and metaphor analysis, to ground this claim and to demonstrate what alternative discourses might be possible. The article then argues that moving toward an 'interpretive' discourse will expand the values of Technical Communication, but in a way that both retains existing assumptions but also includes a new focus on the 'complete person.' Interpretive discourse is theorized using Habermas' communicative rationality and User Experience Design and the article concludes with some implications about moving Technical Communication toward discursive diversity. Ultimately, the goal of the article is to encourage researchers, teachers, and professionals to embrace this discursive diversity that complicates our historical means-ends rationality."

Daniel Drahnak

Looking across the divide: Analyzing cross-disciplinary approaches for teaching business communication

Laster, N. M., & Russ, T. L. (2010). *Business Communication Quarterly, 73*, 248–264.

"This study elucidates pedagogical differences and similarities between the ways in which instructors from business and communication disciplines teach the introductory business communication course. During the spring of 2008, the authors surveyed 444 instructors teaching this course at colleges and universities across the United States. Their findings highlight several cross-disciplinary commonalities and disparities. The article discusses potential implications for the complementary and contradictory instructional approaches and call for

more cross-disciplinary uniformity in contemporary business communication education."

J. A. Dawson

Mapping technical and professional communication: A summary and survey of academic locations for programs

Yeats, D., & Thompson, I. (2010). *Technical Communication Quarterly*, 19, 225–261.

"This article provides an account of the academic location of 142 technical communication programs as reported on program Web sites as well as in an online survey sent to technical communication program coordinators. According to the findings, most technical communication programs are located in departments of English, but programs outside of English are more likely to offer graduate degrees and a more technically oriented program focus."

Christine Cranford

The province of sophists: An argument for academic homelessness

Harlow, R. M. (2010). *Technical Communication Quarterly, 19,* 318–333.

"Scholars in our field frequently explore issues of positioning and disciplinary identity, thus revealing insecurity about our institutional value. We must realize that our homelessness within the academic neighborhood is a position of strength, not weakness. As knowledge grows increasingly specialized, our ability to position ourselves in various places within an institution gives us an administrative flexibility, marketability, and proximity to the fields that we study."

Christine Cranford

Resisting the lure of technology-driven design: Pedagogical approaches to visual communication

Northcut, K., & Brumberger, E. (2010). *Journal of Technical Writing & Communication, 40*, 459–471.

"Technical communicators are expected to work extensively with visual texts in workplaces. Fortunately, most academic curricula include courses in which the skills necessary for such tasks are introduced and sometimes developed in depth. We identify a tension between a focus on technological skill vs. a focus on principles and theory, arguing that we subvert the potential benefits of an education if we succumb to the allure of software. We recommend several classroom practices that help educate students toward greater visual literacy, based not only on recommendations from the research but also from our experience as teachers of visual communication."

Daniel Drahnak

Students' conceptions of tutor and automated feedback in professional writing

Calvo, R. A., & Ellis, R. A. (2010). *Journal of Engineering Education*, *99*, 427–438.

"Professional writing is an essential outcome for engineering graduates and hence a vital part of engineering education. To provide a successful learning experience for students engaged in writing activities, timely feedback is necessary. Providing this feedback to increasing numbers of students poses a major challenge for instructors. New automated systems work towards providing both timely and appropriate writing feedback, but students' views on automated feedback, and feedback in general, are not well understood .... Students' conceptions of feedback vary and can be grouped into cohesive and fragmented, which is consistent with other theoretical models. Close associations were found between more cohesive conceptions of feedback and better academic performance … A student's conception of traditional and automated feedback is similar, being either cohesive or fragmented. Changing one may change the other. Deep learners see feedback as a way of learning about the topic whereas shallow learners see them as a way to improve the communication aspects of writing. Design considerations based on these results are discussed."

J. A. Dawson

Technical communication instruction in China: Localized programs and alternative models

Ding, H. (2010). *Technical Communication Quarterly, 19,* 300–317.

"In this article, I argue that to understand technical communication instruction in non-Western countries, one has to pay close attention to the impacts of local cultural, educational, political, and economic contexts on technical communication practices. I identify two localized programs that share features of technical communication in China and review their programmatic positioning at national and local levels. I also suggest ways for U. S. technical communicators to start cross-cultural collaboration with local programs."

Christine Cranford

Information Management

DITA learning and training: A strategic overview

Klukewich, T. (2010). *Best Practices, 12*, 90–95. [Center for Information Development Management]

"With training deliverables covering processes well outside of technical documentation, DITA Learning and Training has the potential to reach a far wider audience of DITA adopters. In this article, I discuss the need for well-defined best practices in a learning and training implementation, …. entertain a documentation maturity model that includes both product documentation and training content, …. [and] touch on what skill sets to look for in a new world of combined and coordinated documentation and training groups."

Sherry Southard

Forgetting about documents with structured writing

Berry, M. (2010). *Best Practices, 12*, 81, 84–86. [Center for Information Development Management]

"If documentation teams convert existing documents into well-structured units of information *before* converting to XML, the team can save itself a huge amount of pain. This article explains the issues that have confronted some companies and how the book metaphor contributed to problems …. [Some of the resistance to abandoning the book metaphor can be resolved] when the writers acknowledged the difference between a book that presented a story, such as a how-to or white-paper, versus documents that do not rely on the reader to consume the material in a particular order, such as application help, developer's guides, or API reference guides."

Sherry Southard

IDCMS Blue: IBM component content management system for DITA

Holt, T., Iantosca, M., Patterson, E., & McMonagle, S. (2010). *Best Practices, 12*, 96–98. [Center for Information Development Management]

"IDCMS Blue is a new Darwin Information Typing Architecture (DITA)-optimized component content management system. The system described in this article is developed and used internally by IBM Information Development teams worldwide to manage the development of client-facing technical documentation and integrated user assistance. [Project team members] describe the benefits of the new system and the experiences of two teams that are now using it to produce their product documentation."

Sherry Southard

Seven signs that an organization should use DITA

Yeo, S.-L. (2010). *Best Practices, 12*, 99–100. [Center for Information Development Management]

Possible signs include "[1] multiple output format …. [2] frequently updated content in multiple languages …. [3] contracts and/or proposals that share common sections …. [4] frequent re-branding or OEM business model …. [5] complex product variations or customized products …. [6] writers spend too much time formatting documents …. [7] need for more powerful search and/or analytics."

Sherry Southard

The value of conducting client surveys and how to get started

Bozza, C. (2010). *Best Practices, 12*, 87–89. [Center for Information Development Management]

To prepare to conduct a client survey, Bozza discusses the basic stages: "[1] Ask yourself questions; who is the survey for; why are we doing this; how can we improve their experience; what is the best survey method?, [2] Write and edit participant questions, [3] Use the survey tool, [4] Collect the data and present the results."

Sherry Southard

Intercultural Communication

Accommodating toward your audience

Sweeney, E., & Hua, Z. (2010). *Journal of Business Communication, 47*, 477–504.

"The study seeks to add to the current debate on English as a lingua franca by analyzing the role of the native speakers of English in intercultural business negotiations and to what extent they effectively accommodate lingua franca speakers …. The results showed that the native speakers in this sample used a wider range of linguistic devices than the nonnative speakers. The majority of the native speakers attempted to accommodate nonnative speakers, but there was significant variation in the way that individual participants chose their strategies and approached accommodation. The most striking finding was the imbalance between the native speakers' understanding of the issues of intercultural communication and their inability to effectively accommodate nonnative speakers. The implications are discussed."

J. A. Dawson

Activity theory, speech acts, and the "Doctrine of Infelicity": Connecting language and technology in globally networked learning environments

McNair, L. D., & Paretti, M. C. (2010). *Journal of Business & Technical Communication, 24*, 323-357.

"This article draws on activity theory, politics of the artifact, and speech act theory to analyze how language practices and technology interplay in establishing the social relationships necessary for globally networked teams. Specifically, it uses activity theory to examine how linguistic infelicities and the politics of communication technologies interplay in virtual meetings, thereby demonstrating the importance of grounding professional communication instruction in social as well as technical effectiveness. That is, students must learn not only how to communicate technical concepts clearly and concisely and recognize cultural differences but also how to use language and choose media in ways that produce the social conditions necessary for effective collaboration in globally networked environments. The article analyzes two case studies—a workplace and a classroom—that illustrate how the mediating functions of language and the politics of technology intersect as mediating tools in globally networked activity systems. It then traces the implications of that intersection for professional communication theory and pedagogy."

Christine Bates

Belf competence as business knowledge of internationally operating business professionals

Kankaanranta, A., & Planken, B. (2010). *Journal of Business Communication, 47*, 380–407.

"Business English as a lingua franca (BELF) has come to dominate as the shared code used to 'get work done' in international business …. The findings show that BELF can be characterized as a simplified, hybridized, and highly dynamic communication code. BELF competence calls for clarity and accuracy of content (rather than linguistic correctness) and knowledge of business-specific vocabulary and genre conventions (rather than only 'general' English). In addition, because BELF interactions take place with nonnative speakers (NNSs) from a variety of cultural backgrounds, the relational orientation is perceived as integral for BELF competence. In sum, BELF competence can be considered an essential component of business knowledge required in today's global business environment."

J. A. Dawson

"Can you spell that for us nonnative speakers?"

Rogerson-Revell, P. (2010). *Journal of Business Communication, 47*, 432–454.

"This article investigates the role of speech accommodation by native and nonnative speakers of English in a series of international business meetings. The study first of all reveals an awareness by some participants of the need to adjust language for an international audience and an intuitive understanding of some of the ways this can be achieved. Analysis of the meetings' discourse further illustrates some of the normalization and convergence strategies used by some participants throughout the meetings to accommodate linguistic differences and difficulties. It is suggested that such authentic examples could be used as the basis for business communication training resources to help both native and nonnative speakers communicate more effectively in international contexts."

J. A. Dawson

Effects of national culture on types of knowledge sharing in virtual communities

Siau, K., Erickson, J., & Nah, F.-H. (2010). *IEEE Transactions on Professional Communication*, *53*, 278–292.

"Organizations are using virtual communities to facilitate knowledge management and to enhance communication among employees, customers, and other interested individuals. Individual users can use virtual communities to engage in knowledge sharing. Professional communicators need to understand and adapt to a globalized and 'flat' world, where people across different cultures interact freely and easily with one another in virtual communities. An intriguing question regarding virtual communities relates to whether national culture affects communication and types of knowledge sharing. This study examines the influence of U.S. and Chinese national cultures on types of knowledge-sharing activities in virtual communities. The findings indicate that national culture differences between China and the U.S. are also evident in virtual community environments."

Jenny West

English as a business lingua franca in a German multinational corporation

Ehrenreich, S. (2010). *Journal of Business Communication*, *47*, 408–431.

"This article explores the role of English and other languages as perceived by members of upper management in a family-owned German multinational corporation in the technology sector. The findings show that, in the 21st century, English has become an indispensable 'must' in the company and that there is a general understanding that staff at all levels develop their language skills as they see appropriate for their roles within the company. What needs to be learned, however, is not English as a native language but communicative effectiveness in English as a business lingua franca, which—as an international contact language—brings together nonnative as well as native Englishes from various linguacultural backgrounds spoken with varying degrees of proficiency. Learning to cope with the challenges of such diversity, in the context of business communication, seems to happen most effectively in business 'communities of practice' rather than in traditional English training. The study also shows that, despite the dominance of English, other languages are not disappearing from the scene but are, indeed, used as a pragmatic or strategic resource. In particular, German, as the headquarters' language, maintains an important role among individuals and within the organization."

J. A. Dawson

Linguistic repertoires and semiotic resources in interaction

Virkkula-Räisänen, T. (2010). *Journal of Business Communication, 47*, 505–531.

"This article examines professional communication in a multilingual meeting in a small company in Finland within ethnographic, sociolinguistic, and discourse analytic frameworks. English is used as a lingua franca by a group of Finnish and Chinese business professionals. The aim is to study how language is used with other semiotic resources to construct meaning in interaction. In particular, with the focus on an individual participant who was the mediator in the meeting, the goal is to analyze participants' role alignment and interpersonal relationships. The results show that business professionals' roles are renegotiable

in a meeting and by means of language accompanied by embodied actions such as gaze and gestures. The findings also reveal how different languages are used for particular purposes in the meeting."

J. A. Dawson

Organizational communication in France: An overview of current research

Cooren, F., & Grosjean, S. (2010). *Management Communication Quarterly*, *24*, 607–611.

"This introduction to the special forum on organizational communication in France presents the five articles featured by this forum as well as the general context of this subfield of communication studies in France. It is first pointed out that the vast majority of French communication researchers still publish exclusively in French, a situation whose negative and positive consequences are analyzed and commented. We then show that, after twenty years of existence, organizational communication in France is a vibrant and productive academic domain, with many peer-reviewed journals and books published on this topic. The five articles featured in this special forum are then presented, each representing key research agenda that are currently developed in this country: the rationalization of organizing through information and communication technologies (Anne Mayère), the performative dimension of the language of accounting (Bertrand Fauré and Arlette Bouzon), the sociogenetic of organizational texts (Romain Huët), the analysis of written practices in workplace situations (Pierre Delcambre) and the communicational approaches to organizations (Jean-Luc Bouillon). This special forum constitutes a unique occasion to learn about a very significant and interesting body of scientific studies that deserves to be better known by colleagues who do not speak or read French."

J. A. Dawson

Peer reviewing across the Atlantic: Patterns and trends in L1 and L2 comments made in an asynchronous online collaborative learning exchange between technical communication students in Sweden and in the United States

Anderson, P., Bergman, B., Bradley, L., Gustafsson, M., & Matzke, A. (2010). *Journal of Business & Technical Communication, 24*, 296–322.

"In a globally networked learning environment (GNLE), 16 students at a university in Sweden and 17 students at a university in the United States exchanged peer-review comments on drafts of assignments they prepared in English for their technical communication classes. The instructors of both sets of students had assigned the same projects and taught their courses in the same way that they had in the previous year, which contrasts with the common practice of having students in partnering courses work on the same assignment or on linked assignments created specifically for the GNLE. The authors coded the students' 816 comments according to their focus and orientation in order to investigate the possible differences between the comments made by the L2 students in Sweden and those made by the L1 (English as a second language) students in the United States, the possible impact of peer reviewing online, and the influence of the instructors' directions on the students' peer-reviewing behavior."

Christine Bates

Productive tensions and the regulatory work of genres in the development of an engineering communication workshop in a transnational corporation

Gygi, K., & Zachry, M. (2010). *Journal of Business & Technical Communication, 24,* 358–381.

"Although academy–industry partnerships have been a subject of interest in professional communication for many years, they have barely been considered in terms of globally networked learning environments (GNLEs). This empirical case study of an academy–industry partnership, in which the authors participated, examines the opportunities and challenges in applying GNLE practices to the design of a corporate engineering

communication workshop. Using genre-ecology modeling as the analytical framework, the study demonstrates how the pedagogical processes considered for inclusion in such a workshop may be embedded in a network of institutional genres, some of which are associated with strong regulating controls. The findings from this study have implications for those who are interested in applying GNLE practices in workplace contexts and for those interested in using a principled framework for representing the work of such partnership activities."

Christine Bates

Professional communication education in a global context: A collaboration between the Massachusetts Institute of Technology, Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico, and Universidad de Quintana Roo, Mexico

Craig, J., Poe, M., & Rojas, M. F. G. (2010). *Journal of Business & Technical Communication, 24*, 267–295.

"This article describes a beginning research partnership between the Massachusetts Institute of Technology (MIT) and two Mexican universities, the Universidad de Quintana Roo (UQROO) and Instituto Tecnológico y de Estudios Superiores de Monterrey, that has developed and implemented an environment merging the pedagogies of English as a foreign language (EFL) and writing across the curriculum (WAC). The article presents a theoretical background for this partnership based on the research on globally networked learning environments (GNLEs) and then focuses on the early stages of the project as the research teams define their objectives, research methods, and teaching approaches."

Christine Bates

Small talk, rapport, and international communicative competence

Pullin, P. (2010). *Journal of Business Communication, 47,* 455–476.

"This article explores the notion of small talk within the context of English as a lingua franca business communication in an international setting. Until recently, the concept of small talk has been largely ignored or denigrated. However, recent studies indicate that small talk may play a key role in building relations and trust between staff in companies, which is of key importance in effective and productive business. Based on an empirical study, the article argues that small talk may be of particular value to speakers of business English as a lingua franca (BELF) in allowing them to develop solidarity, despite linguistic and cultural differences, and thus increase the likelihood of avoiding or successfully overcoming communication problems. In addition, insights into the nature of such small talk may be of value in raising awareness of aspects of effective communication in international business and the notion of international communicative competence."

J. A. Dawson

Upward influence in contemporary Chinese organizations: Explicating the effects of influence goal type and multiple goal importance on message reasoning and politeness

Shi, X., & Wilson, S. R. (2010). *Management Communication Quarterly, 24*, 579–606.

"This study reports a goal-based analysis of how Chinese employees engage in upward influence with their supervisors. Results indicate that the types of influence goals (personal vs. organizational) must be studied in conjunction with the importance attributed to multiple goals (e.g., clarity, relationship maintenance) to explain message features. Chinese employees who recalled pursuing a personal upward influence goal placed greater importance on relationship goals, expressed more approval for their supervisor, and mixed personal- and work-focused reasons to a greater extent than did those who recalled pursuing an organizational goal. For both types of influence goals, relationship goal importance significantly predicted message politeness while clarity goal importance predicted number of reasons given. Future research exploring general and cultural-specific aspects of upward influence is proposed."

J. A. Dawson

Public Relations

Corporate proactivity as a discursive fiction: Managing environmental health activism and regulation

Zoller, H. M., & Tener, M. (2010). *Management Communication Quarterly, 24*, 391-418.

"This essay problematizes dominant theorizing about proactive communication in public relations and issue management. Current literature promotes proactive stakeholder engagement to prevent reputational damage rather than harm reduction to prevent crises from occurring. In practice this approach legitimizes a paradoxical corporate strategy framing crisis responses as proactive. Such framing attributes corporate improvements to voluntary corporate social responsibility (CSR) rather than external sources such as activist and regulatory challenges. An ethnographic study of a 'good neighbor' environmental health campaign targeting a chemical plant found that the discursive construction of proactivity was significant because it (a) played a central role in public sensemaking about organizational legitimacy and responsibility and (b) influenced perceptions about the sources of corporate innovation and change."

Sherry Southard

An economic industry and institutional level of analysis of corporate social responsibility communication

O'Connor, A., & Shumate, M. (2010). *Management Communication Quarterly,* 24, 529–551.

"This study identifies the similarities and differences in corporate social responsibility (CSR) communication at the institutional and economic industry level of analysis. Findings suggest that at the institutional level of analysis, a corporate consensus exists about the scope of CSR and is largely understood as welfare capitalism. However, at the economic level of analysis, differences across economic industries exist based on value chain position. Specifically, industries further up the value-chain focus on the safety of their employees, ethical business practices, and environmental stewardship as essential elements of CSR, whereas economic industries closer to customers in the value chain were more likely to focus on philanthropy and education as CSR."

J. A. Dawson

Public relations leadership in corporate social responsibility

Benn, S., Todd, L. R., & Pendleton, J. (2010). *Journal of Business Ethics, 96*, 403–423.

"Many of the negative connotations of corporate social responsibility (CSR) are linked to its perceived role as a public relations exercise. Following on calls for more positive engagement by public relations professionals in organizational strategic planning and given the rapidly increasing interest in CSR [corporate social responsibility] as a business strategy, this article addresses the question of how the theory and practice of public relations can provide direction and support for CSR. To this end, this article explores leadership styles and motivations of a sample of corporate leaders from prominent Australian-based corporations in relation to their chosen CSR activities to examine the current position of, and potential for, professional communicators' impact in shaping CSR-driven policies at a strategic level. We find that while public relations theory has evolved, many leaders still see public relations professionals only as a source of positive publicity .... We conclude that the public relations profession needs to develop a greater understanding of senior management approaches to the development and dissemination of CSR activities to support organizational leadership as it currently operates with respect to CSR."

Sherry Southard

Research

Employee reactions to paper and electronic surveys: An experimental comparison

Croteau, A., Dyer, L., & Miguel, M. (2010). *IEEE Transactions on Professional Communication*, *53*, 249–259.

"Using a within-subjects field experiment, we tested the differences between paper-based and electronic employee surveys. Employees of a large organization were invited to respond to a paper survey as well as an identical electronic survey. Results from 134 employees who completed both questionnaires indicated that electronic surveys were seen as marginally easier to use and more enjoyable than paper surveys. However, the paper-based questionnaires produced a higher response rate. The self-reported likelihood that participants would respond to similar questionnaires in the future did not differ between the two formats. After comparing the answers on survey items that measured feelings of well-being and spending patterns, data quality also appeared to be equivalent across the two formats. Conceptual issues, as well as the implications for managers who are administering employee surveys, are discussed."

Jenny West

Ethos, pathos, logos, kairos: Using a rhetorical heuristic to mediate digital-survey recruitment strategies

Rife, M. C. (2010). *IEEE Transactions on Professional Communication, 53*, 260–277.

"How might the rhetorical strategies of ethos, pathos, logos, and kairos play a mediational, intervening role in the successful administration of online surveys? What are the general costs and benefits of conducting survey research? Based on the activity of administering an online survey (N = 334) testing knowledge and understanding of US copyright law among digital writers (both students and teachers) in U. S. technical and professional writing (TPW) programs, I blend Rhetorical Theory with Activity Theory by conducting a rhetorical analysis within an Activity Theory paradigm. I posit that a rhetorically informed heuristic mediates between the researcher and potential participants when the researcher attempts to recruit individuals to respond to an online survey."

Jenny West

Scientific Writing

Arithmetic of the species: Darwin and the role of mathematics in his argumentation

Wynn, J. (2009). *Rhetorica, 27*, 76–97.

"[T]here has as yet been no substantive discussion about the rhetorical importance of mathematics in making arguments in The Origin of Species. The purpose of this paper is not only to fill this scholarly gap, but also to examine why this aspect of Darwin's argument has gone largely unexplored. To accomplish these goals, [the author] will 1) investigate possible reasons why this rhetorical dimension of Darwin's argument has received so little attention, 2) analyze Darwin's argumentative strategy in The Origin of Species to reveal the presence and importance of mathematical argumentation, and 3) examine the philosophical/methodological context in which Darwin's arguments were made to validate the importance of his mathematical arguments as strategies for persuasion."

Edward A. Malone

The conduit between lifeworld and system: Habermas and the rhetoric of public scientific controversies

Crick, N., & Gabriel, J. (2010). *Rhetoric Society Quarterly, 40*, 201–223.

"The vibrancy and health of political culture in democratic societies increasingly depends on the publicity and resolution of public scientific controversies. However, creating a framework for analysis that avoids reductive categorization remains a difficult task. This essay proposes a Habermasian framework of analysis for public scientific controversies and draws out its rhetorical implications. We argue that the roots of public scientific controversies are found in

moments of urgency that call forth contested scientific theories into the public realm. These controversies embed epistemological disputes over knowledge-claims within pragmatic contexts, thus forcing interested parties to achieve some level of intersubjective consensus on the legitimacy of broad-based policies that fuse politics, ethics, and science. These controversies thus provide the situational grounds that make possible, if not always actual, the interaction among citizens, scientists, and legislators through rhetorical forums that feature the discursive interplay among epistemological concerns, aesthetic experience, moral valuation, and practical judgment."

Brent Henze

The impact of NSF and NIH: Websites on researcher ethics

Hoover, R. (2010). *Journal of Technical Writing & Communication, 40,* 403–427.

"The fragmentation of science and medicine research in recent years has led to the creation of sub-disciplines with distinct identities and ethics. Like many social communities, these sub-disciplines have found websites of federal funding agencies such as the National Science Foundation (NSF) and National Institutes of Health (NIH) to be an effective and efficient home in which to solidify that identity and communicate those values. Despite the lack of collaborative, Web 2.0 technologies, the sites of NSF and NIH are able to communicate the ethics of the science communities they serve through rhetorical structures as diverse as graphics, page layout, and site structures. This article explores that role of NSF and NIH, including the rhetoric used, the ethics presented, and their broader implications."

Daniel Drahnak

Marketing longitude: Clocks, kings, courtiers, and Christiaan Huygens

Howard, N. (2008). *Book History, 11*, 59–88.

Seventeenth-century Dutch mathematician Christiaan Huygens invented a pendulum clock and wrote texts to explain and market this invention. In this case study of technical marketing communication, Howard explores "the way Huygens actively cultivated heterogeneous audiences for his published works by tailoring them to particular readers and distributing them in strategic ways."

Edward A. Malone

Riding out of bounds: Women bicyclists' embodied medical authority

Hallenbrook, S. (2010). *Rhetoric Review, 29*, 327–345.

"With its wide circulation and its resistance to old-fashioned morality, the popular magazine provided late nineteenth-century American women a location within which to counter doctors' long-held views of their physical frailty. In articles promoting the bicycle as an agent of women's health, nonmedically trained women countered medical commonplaces of women's limited energies and need for constant doctor scrutiny. Instead, they posited a renewable, self-governing female body capable of taking on both the bicycle and the challenges of the new century. In doing so, they influenced doctors' perspectives on women's bodies from outside professional boundaries."

Brent Henze

Usability Studies

Assessing concurrent think-aloud protocol as a usability test method: A technical communication approach

Cooke, L. (2010). *IEEE Transactions on Professional Communication, 53,* 202–215.

"Concurrent think-aloud protocol (CTA) is often used in usability test settings to gain insight into participants' thoughts during their task performances. This study adds to a growing body of research within technical communication that addresses the use of think-aloud protocols in usability test settings. The eye movements and verbalizations of 10 participants were recorded as they searched for information on a website. The analysis of transcripts and real-time eye movement showed that CTA is an accurate data-collection

method. The researcher found that the majority of user verbalizations in the study included words, phrases, and sentences that users read from the screen. Silence and verbal fillers that occurred during CTA enabled users to assess and process information during their searches. This study demonstrates the value technical communicators add to the study of usability test methods, and the paper recommends future avenues of research."

Jenny West

Synthesizing IT case studies of nonprofits using a multiple-level patterns-based framework

Kase, S. E., Zhang, Y., Carroll, J. M., & Rosson, M. (2010). *IEEE Transactions on Professional Communication, 53*, 216–232.

"To better understand how individuals, groups, and organizations can use information systems more effectively, a research approach closer to the level of social interchange is required. A multiple-level, sustainable, information-technology (IT) learning framework, rooted in patterns of practice and constructed by participatory action research, offers an alternative methodology for investigating sustainable strategies of IT learning. The framework evolved from concrete instances of IT learning across organizational case studies. A patterns-based analysis of the ethnographic data enabled the examination of informal IT learning in community contexts and the identification of IT interventions more likely to produce successful learning outcomes."

Jenny West

Technical communication and usability: Intertwined strands and mutual influences commentary

Redish, J. (2010). *IEEE Transactions on Professional Communication, 53*, 191–201.

"Technical communication and usability (user experience, or UX) have a long, intertwined history, dating back at least to the 1970s. The author, who has been active in both fields for the last three decades, gives many examples of how technical communicators have influenced UX practice and how usability specialists have influenced technical communication. The author also explores how technical communicators can continue to contribute to future UX theory, research, and practice through collaboration, through their communication skills, dealing with the reality of ever-increasing complexity in products and processes and dealing with the need to adapt to more rapid change."

Jenny West